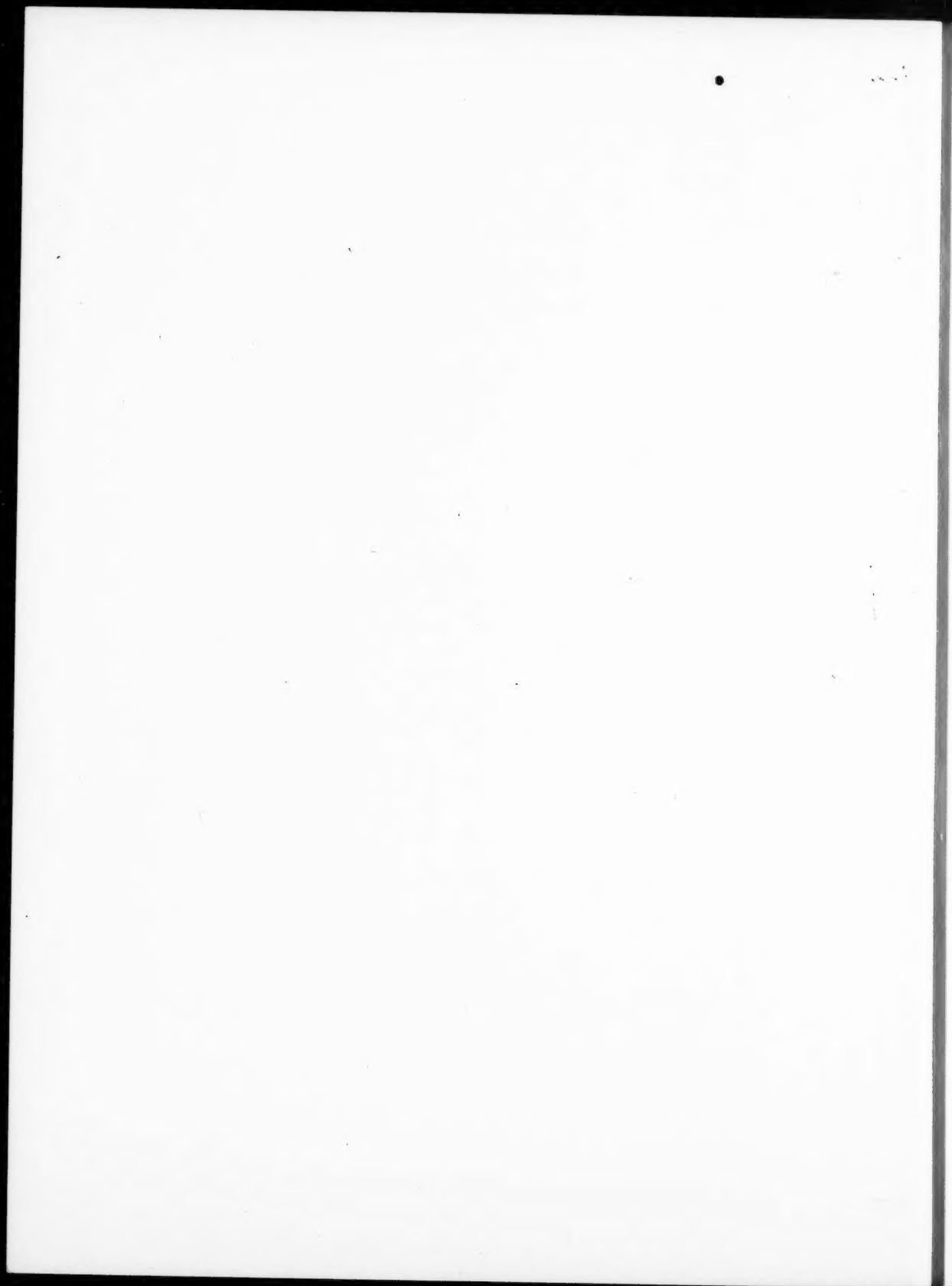


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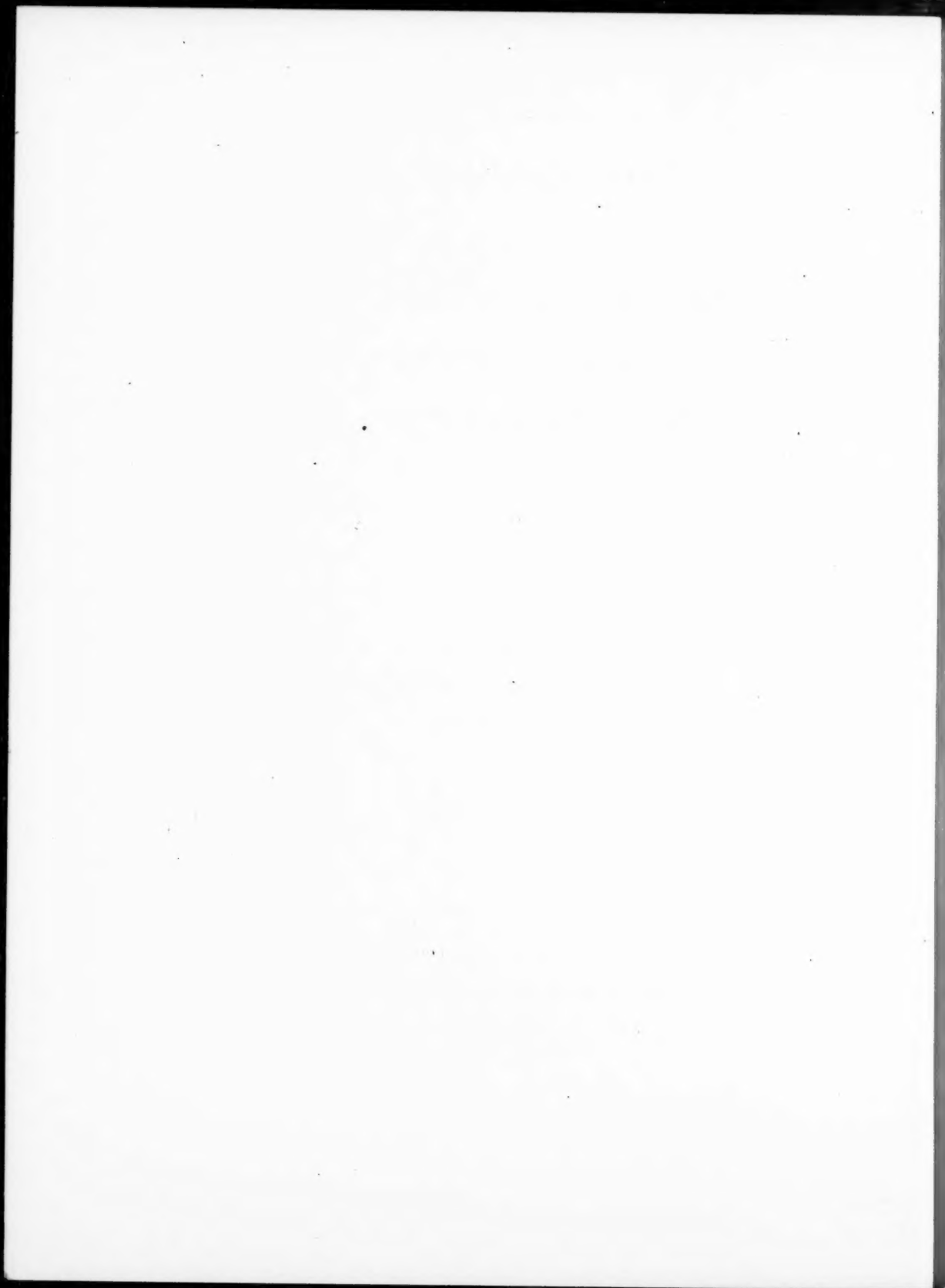
THE ANNUAL
OF THE
AMERICAN SCHOOL
OF ORIENTAL RESEARCH
IN JERUSALEM .

VOL. I
FOR 1919-1920

EDITED FOR THE MANAGING COMMITTEE BY
CHARLES C. TORREY

PUBLISHED AND SOLD BY THE
YALE UNIVERSITY PRESS
NEW HAVEN, CONN.

1920



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PREFACE

The researches of the officers and students of the American School in Jerusalem have hitherto been published from time to time in scientific periodicals, such as the *Journal of the American Oriental Society*, the *Journal of Biblical Literature*, and the *American Journal of Archaeology*. Two collections of offprints from the *Journal of Biblical Literature* were published separately in 1903 and 1906 under the title: *Papers of the American School for Oriental Study and Research in Palestine*, I and II.

The need of separate and regular publication has been more and more strongly felt, but lack of funds has prevented. The improved outlook for the work of the School, due in part to the new and promising conditions in Palestine and partly to increased support at home, decided the Executive Committee in 1919, on the resumption of the School's activities after the war, to begin the issue of an annual volume, the extent of which will vary from year to year.

The first number, which is here presented, contains a selection of papers which have been for some time awaiting publication. The order is chronological. The author of the first paper was Director of the School in 1900-01, the year of its establishment; Professors Mitchell and Paton were Directors in 1901-02 and 1903-04 respectively*; and Professor Moulton, who was a special student in the School in 1902-03, was afterward Director in 1912-13.

The Report of the Chairman of the Managing Committee of the School for the year 1918-19 was published in the *Bulletin of the Archaeological Institute of America*, Vol. 10 (December, 1919), pp. 31-35; and the annual Financial Statement of the Treasurer *ibid.*, pp. 79 f. These two Reports, together with the Regulations of the School and information in regard to Fellowships, were reprinted as usual in a separate pamphlet and distributed among the friends and supporters of the School.

* Professor Mitchell died May 19, 1920, while this volume was in press.

New Haven, Conn., May, 1920.



A PHOENICIAN NECROPOLIS AT SIDON.

CHARLES C. TORREY.

Yale University.

The first bit of excavation undertaken by the American School in Jerusalem was the exploration of a series of Phoenician rock-tombs which were discovered and opened in January and February of the year 1901. A report of the work was furnished at the time to the Managers of the School, and photographs of the principal finds which were made have been exhibited from time to time, but no detailed account of the excavation has hitherto been published. The present account can only be termed preliminary, for there is need of a more careful examination of the principal objects excavated than has thus far been possible.

The site of the excavation was an open field somewhat more than a mile southeast of the city of Sidon, beyond the Barghūt "river" near the place called 'Ain Hīlweh, where the ground begins to rise from the maritime plain into the foot-hills of the Lebanon range. A short distance to the west, and in full view, lies what seems to have been the principal burying-ground of ancient Sidon, the famous necropolis which for many centuries has been known to the natives of the region as Maghāret Ṭablūn (originally Maghāret Ablūn), or "Cave of Apollo," which I some time ago identified with the Ereṣ Reṣūf, "Reṣūf District," mentioned in an inscription of King Bod-'Astart of the Ešmūn'azar dynasty as one of three districts belonging to greater Sidon.¹ The field at 'Ain Hīlweh was known to have contained some Phoenician remains. Quarrymen, testing the stratum of stone underneath the soil, about the year 1880, came upon two shaft-tombs, from one of which they took out an anthropoid sarcophagus. This tomb was left open; the other was filled up, but a slight depression in the surface of the field showed its location.

The land was the property of the American Presbyterian Mission in Sidon, and its owners were not unwilling to have something done in the way of exploration. Stone for building was in great demand, and such an examination as I wished to make would at least locate a part of the limestone or sandstone, and might also give valuable information as to its quality and depth. Of course the proprietors of the field, as well as I, hoped that antiques would be brought to light, but there was no great

¹ See *Journal Am. Or. Society*, vol. 29 (1908), pp. 192 f. The identity of the god Reṣūf with Apollo has long been assured.

expectation of this. A few of the older native inhabitants of the city told of having heard that the refilled tomb, mentioned above, contained an anthropoid sarcophagus with the lid broken. There was otherwise no reason to believe that the region contained a necropolis, nor had any one in modern times, as far as I am aware, suspected this to be the case. Work was begun on the 28th of January with a force of six men (the number was afterward increased to thirty-two), under agreement with the owners of the land that the American School in Jerusalem should bear the expense

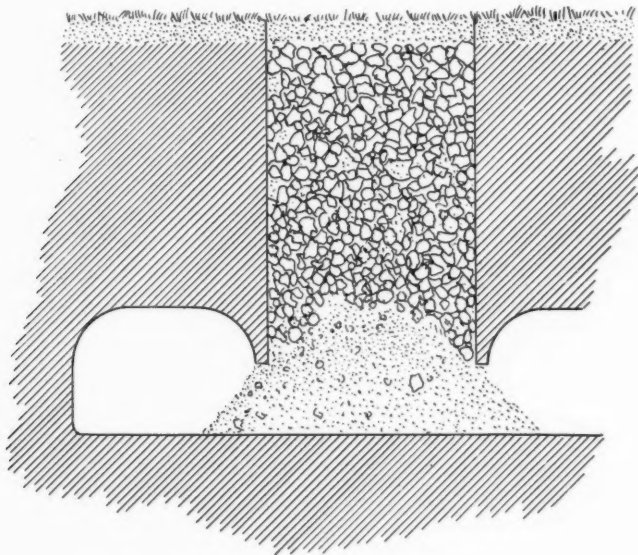


Fig. 1. Section of Typical Tomb.

of the exploration, with full and unconditional right to publish the results, but without claim to any objects that might be found.

First of all, the refilled tomb was opened. The field was planted with grain, which was already growing vigorously, and the depression in the soil, marking the mouth of the shaft, was hardly noticeable. When the surface of the rock underlying the soil was laid bare, the mouth of a rectangular well filled with earth and stones appeared. This first tomb proved to be typical in all respects, and it should be remarked that the tombs of this necropolis show little variation in their characteristic features. The general description is as follows. The opening measures 8 or 9 by 3 or 4 feet,

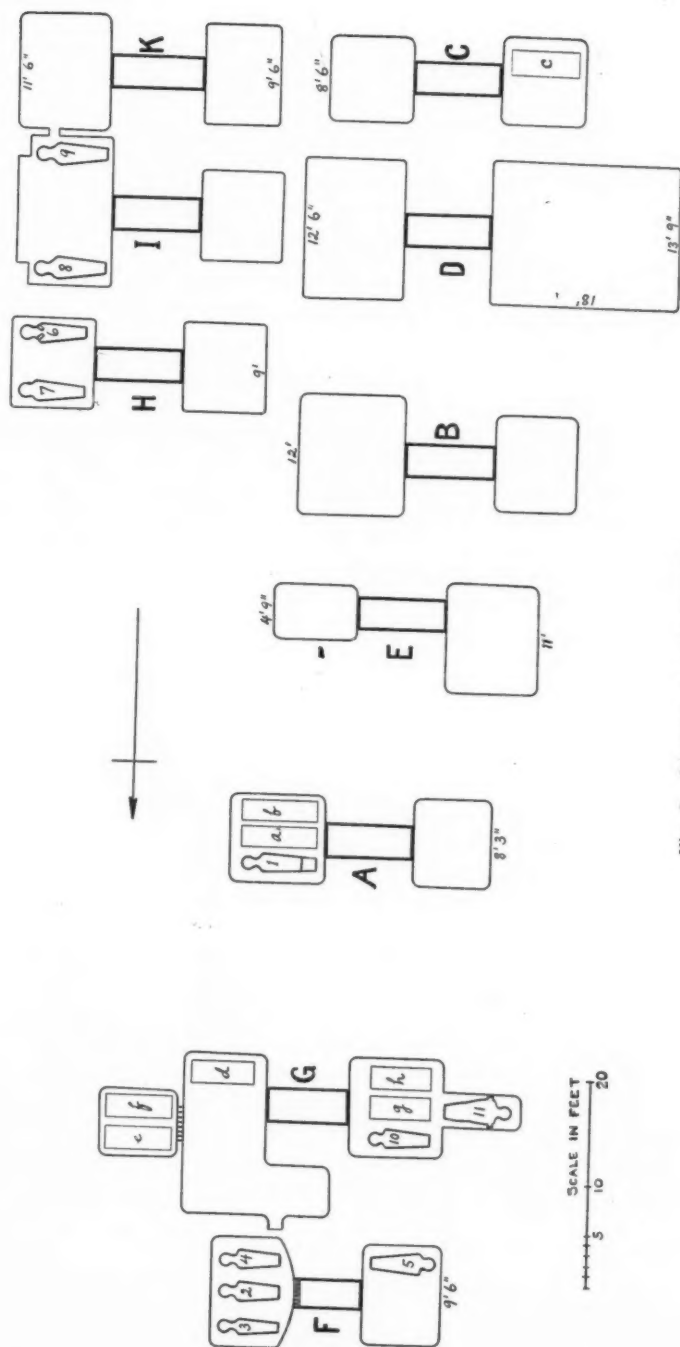


Fig. 2. Diagram of the Necropolis.

the longer axis running east and west. The shaft is perpendicular, going down 18 feet in solid limestone rock. It is cut carefully and smoothly, preserving the same dimensions throughout its extent. At the bottom, openings approximately 3 feet square lead to vaulted chambers, $5\frac{1}{2}$ to 6 feet in height, one on the east and another on the west. These tomb-chambers vary greatly in their dimensions, as will be seen. In the tomb first opened (Tomb A), the chambers measured approximately 8 feet square; see the plan for the exact dimensions. The western chamber, nearly half filled with moist earth, was otherwise empty; that on the east, in which loose earth was piled to a depth of two feet or more, was found to contain three sarcophagi almost completely buried. This was the only case in which any considerable quantity of earth was found in the tomb-chambers, except of course at the very entrance. One of the three sarcophagi proved to be an "anthropoid"; and the native tradition as to this tomb was found to be based on true information, for the lid was broken in two. The other two sarcophagi were rude sandstone boxes, altogether unlike anything else that was found in the necropolis. It became evident on examination that this tomb had been reopened for burials at a comparatively late period; the evidence of this will be given in the sequel.

After taking out the sarcophagi and their contents, and various small objects which were found, and removing and sifting the loose earth, the next step was to examine the open tomb (B), the mouth of which was about twelve yards distant, a little west of south. This was of course quite empty, and its two chambers yielded nothing but measurements. The search for still other tombs was for some time unsuccessful, though soundings were made in every direction. There was at the surface of the ground nothing to indicate the whereabouts of any tomb. The rock was everywhere covered with soil to the depth of a foot or two, and it was necessary to remove more or less of this layer of earth wherever search was made for the rectangular cutting in the rock which indicated the mouth of a shaft. At last a third tomb (C) was discovered, 33 feet due south of B. Its western chamber contained a plain rectangular sarcophagus of white marble, having a cover in the form of a ridged roof of wide angle, one of several of like pattern found in the course of the excavations. The dimensions: length 6 feet, $9\frac{1}{2}$ inches; width 2 feet, 2 inches; height, without cover, 1 foot, 2 inches; thickness of cover at edge $4\frac{3}{4}$ inches; height of ridge 9 inches. Tomb D, between B and C, was next uncovered and opened. Its large chambers contained no sarcophagus, nor any antiquities of especial importance. Tomb E, a few yards north of B, was likewise empty, and yielded next to nothing. It was the general opinion that further digging in this field would be a waste of time and money, to say nothing of damage to a promising crop of grain. But now that a necropolis of some extent and a

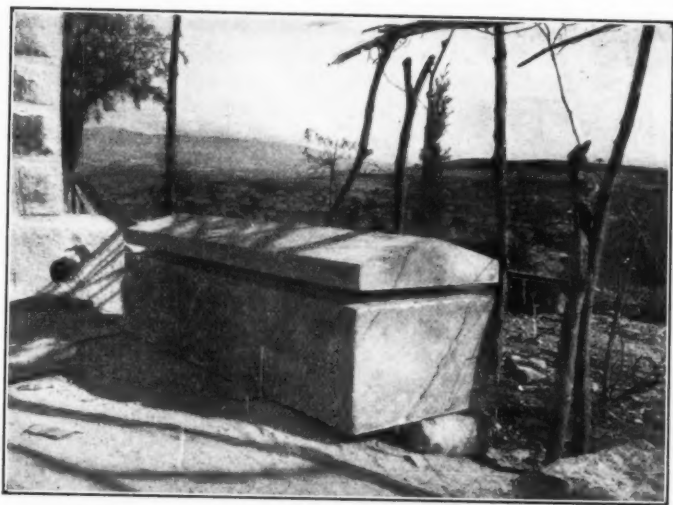


Fig. 3. Sarcophagus *g*.

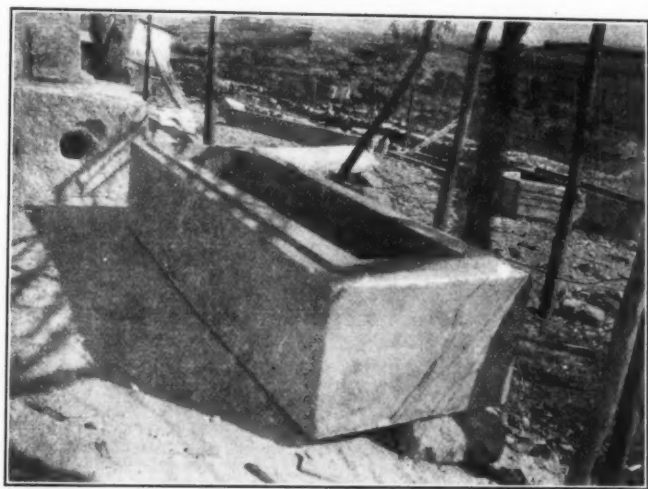


Fig. 4. Sarcophagus *g*, without Cover.

fairly definite plan had been brought to light it seemed desirable to continue the soundings a few days longer.

A fortnight from the day of beginning the excavations, a shaft (F) was uncovered a short distance to the north; and when the diggers at last reached the bottom (the well was filled partly with cobble-stones) they found the entrance to the eastern chamber walled up with stones held together by a blackish cement. When this wall was removed, the next day, three anthropoid sarcophagi were seen, lying side by side. The western chamber was then opened, and was found to contain a single anthropoid of smaller size than any of the others. Near the southwestern corner of the eastern chamber there was a hole in the wall, barely large enough to permit a man to squeeze through. Lighted candles showed a cavern of portentous size; we were looking into a chamber of what proved to be the largest and most important tomb-complex in the necropolis. The opening was enlarged, and shaft G was located. The plan of G was found to be more elaborate than any of the others. Its eastern chamber had been enlarged toward the north, and then given an extension toward the west; moreover, on its eastern side it was continued by another, smaller cavern, the entrance to which we found walled up. The western chamber of the tomb was also extended westward by a niche in the rock measuring 7 feet, 6 inches \times 3 feet, 1 inch. Tomb G yielded seven marble sarcophagi, five of rectangular shape and two anthropoids, disposed as shown in the plan of the necropolis. One of the rectangular sarcophagi (the one designated by the letter *g*) was especially massive and elaborate, and bore the Phoenician letter *aleph* in ornamental form. The two anthropoids were the most interesting of all that were found in the course of the excavation; indeed, a finer specimen of painting than that shown by No. 11 has never been unearthed.

Before the long and laborious task of emptying these tomb-chambers, with minute examination and record of every detail, had been accomplished, soundings in the southeastern corner of our necropolis had discovered three more shafts, H, I, and K. In due time these tombs also were opened, and the eastern chambers of H and I were found to contain each two anthropoids. Tomb I had a handsomely plastered shaft, and its eastern chamber had been carefully enlarged at some time subsequent to the first burials in it (see below). This enlargement brought it so near to the corresponding chamber of K that some one, either knowing the plan of the tombs or discovering the thinness of the intervening wall, had cut a doorway through. Further soundings showed no more tombs at this time, and the excavation ended at this point.

Besides the nineteen sarcophagi and their contents, we found in the tombs numerous specimens of the customary small objects: lamps, dishes, and pottery in various forms; figurines, painted or glazed; glass ware



Fig. 5. A Critical Moment.



Fig. 6. Bringing up a Heavy One.

(only one or two unimportant specimens); alabastra; an assortment of bronze objects; a few small gold ornaments; and several coins; these last-named providing a curious bit of chronological evidence.

Nearly all of the excavated antiquities were found to have suffered more or less from the periodic flooding of the tombs with rain water. As has already been said, the tombs of this necropolis were all of one type, rock tombs with perpendicular shaft. A considerable amount of water trickles in the rainy season through the earth with which the shaft is filled. In cases where the filling consisted largely of good-sized stones, as in F, G (especially), and I, the process was more rapid. Water once collected in these closed caverns evaporated slowly, still more slowly when it had found its way into the closed sarcophagi. After a succession of very rainy seasons the water might stand two or three feet deep in these tomb-chambers; and again, after seasons of long continued drought the most of it would disappear. The season of 1900-1901 was said to be the driest in thirty years in that region, and this doubtless accounts for the fact that we found all the chamber floors dry, or nearly so, though any accumulated earth was likely to be moist. But the sarcophagi told the story. When Sarcophagus *d* (eastern cavern of G) was opened, it was found to contain two skeletons lying in three inches of water. In *e*, in the small adjoining walled-up chamber, the water was a foot deep. Several other sarcophagi either contained water or showed where it had been. In the anthropoid numbered 8, the larger of the two in I—the tomb of a man of high rank—the body had been wrapped in linen. Periodically soaked with rain water, the cloth had decayed, and portions of it could be seen incrustated around the inside of the sarcophagus at more than one distinct level. A fragment showing the texture of the cloth is to be seen in the upper right hand corner of Fig. 12.

The history of the use of these tombs covers a considerable period. The marble sarcophagi probably belong mainly to the fifth and fourth centuries B. C. But there is conclusive evidence of much later occupation of one tomb. The rude sandstone sarcophagi in A contained nine skeletons, five in one and four in the other.² Five bronze coins were found among the bones in this tomb. They were badly corroded, but two of them I could recognize with certainty as coins struck in Sidon between 218 and 222 A. D. Both are coins of the emperor Elagabalus; one bearing on the reverse Europa and the bull, the other, Victory striding to left, holding symbols in either hand. As is well known, it frequently happened, under stress of circumstances, that old tombs were reopened after a long time, and used

² It should be added, that the bodies were not piled in promiscuously, but were disposed symmetrically. In the sarcophagus containing five, the heads of three were toward the east, the two others toward the west.

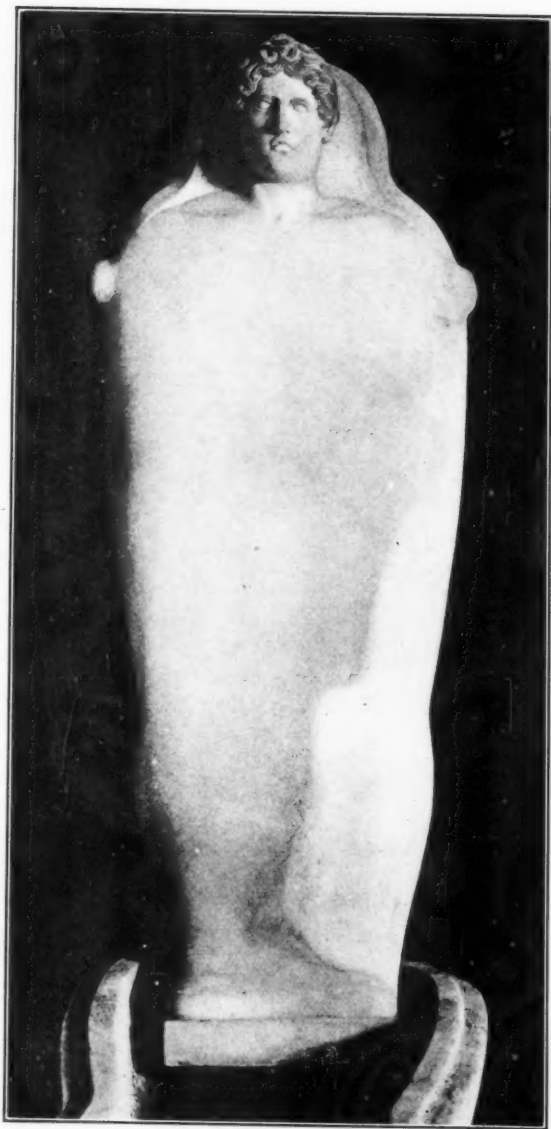


Fig. 7. Anthropoid Sarcophagus from 'Ain Hilweh.

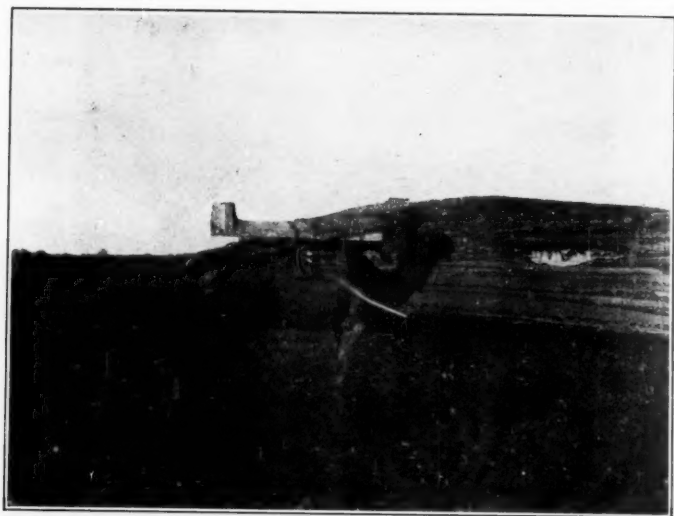


Fig. 8. The Beast of Burden.



Fig. 9. Another Mode of Transportation.



Fig. 10. The "Anthropoids" of the Excavation.

again for burial.³ Another bit of evidence of this in the case of our necropolis was the finding, in the débris with which one of the shafts had been filled, of a small fragment of a Greek funerary inscription on coarse marble. It is on the contrary the normal process of continuing to use a tomb until



Fig. 11. Figurines from the Tombs.

it is full that is illustrated in I, where it seems to be the case that the form and arrangement of the tomb were altered at some time subsequent to the original burials.⁴ Niches were cut on either side, and into these the two anthropoids were moved, the space between them being used for further

³ An interesting example in the *Chronicle of Joshua the Stylite*, ed. Wright, p. 39, lines 6-11.

⁴ Cf. Renan, *Mission de Phénicie*, 1864, p. 408.

burials. We found here four skeletons lying parallel on the floor of the cave, the skulls toward the east.

It is not always necessary to suppose, in cases like the one just mentioned, that the bodies were entombed without coffin of any sort. In this very instance we found a number of bronze nails, much corroded, among the bones, suggesting that wooden coffins may have been used. Similar evi-

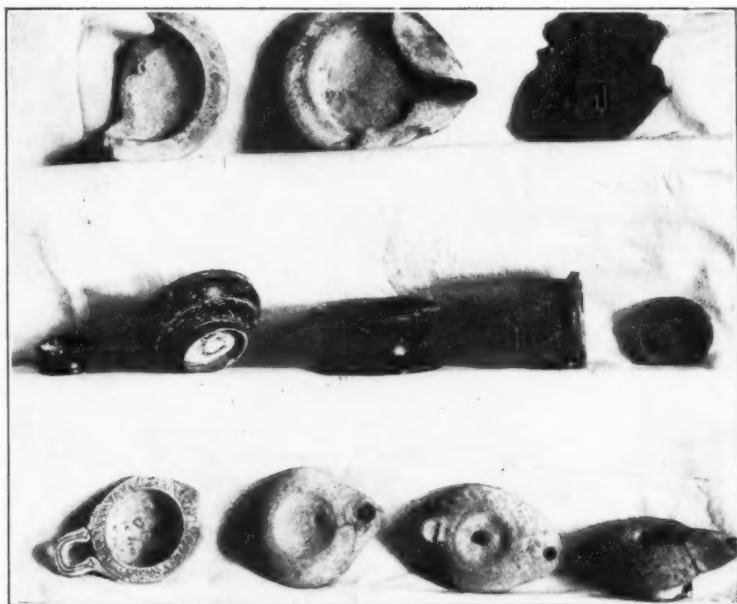


Fig. 12. Lamps and Small Dishes.

dence was found in other tombs. In the large western chamber of D the traces of three wooden coffins could be seen on the floor, two on the south side and one on the north. In the eastern chamber of the same tomb, a bronze nail had fragments of rotten wood still clinging to it. Three skeletons were lying here, while in the western chamber there were only two. Skeletons without sarcophagus were found also in E (east, two; west, five) G west (one, a child), and H west (two). With the single exception already mentioned, each marble sarcophagus contained one skeleton. In the eastern chambers, the sarcophagi and bodies were placed with heads

toward the east; in the western, toward the west. The solitary exception—aside from the two sandstone boxes with their manifold burials—was Anthropoid No. 10. This I presume to have been moved from its original position, perhaps at the time when No. 11 was moved to make room for the two rectangular *thecae*.

The bones were generally carious, often crumbling to pieces, and sometimes had been completely destroyed by the centuries of soaking. The

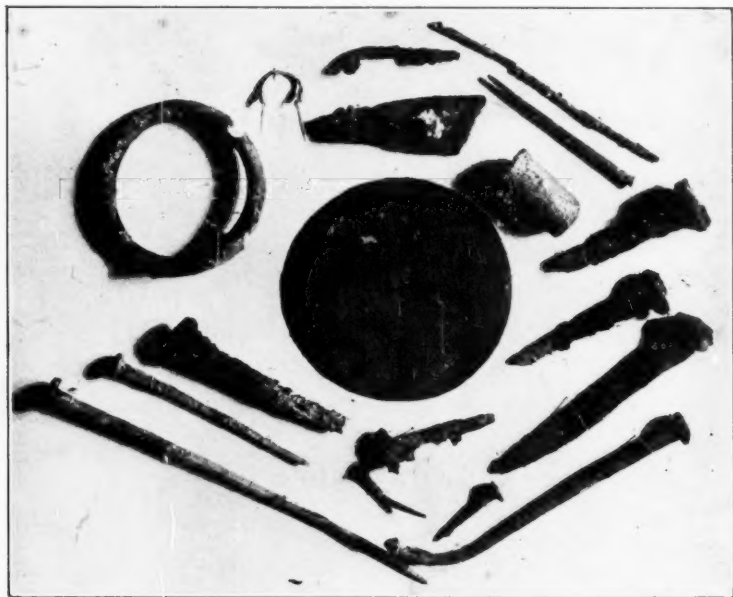


Fig. 13. Bronze Objects.

teeth of these Phoenicians were noticeably well preserved, most of the skulls showing nearly or quite the full complement. All the more interesting was a remarkable bit of dentistry which had been performed on the grandee who was buried in Anthropoid 8. He had suffered from *pyorrhea alveolaris* (as dentists have assured me on the evidence of the photographs) and several of the lower front teeth were badly loosened. His dentist had thereupon undertaken to make a "bridge" of gold wire, using the sound teeth on either side as pillars; and the device—whatever else might be said of

it—was entirely successful in its main purpose of holding the teeth securely in place. A similar specimen of ancient dentistry, also Sidonian, was found by the French expedition of 1860, and is now in the Louvre.⁵

To what extent, if at all, these tombs had been rifled in ancient times is a question difficult of answer. Anthropoids 6, 7, 8, and 9 seem to have been unopened since the time of their entombment. The eastern chamber of F was entered from G (as the cutting in the rock shows), very probably at the time when the latter was enlarged. There was no evidence, however, that any of the three anthropoids had been disturbed. On the other hand, when we opened the western chamber of F we found the cover of No. 5 propped open; and similarly, when we first entered G west, the fine

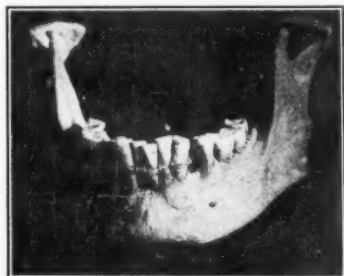


Fig. 14. A Specimen of Dentistry.

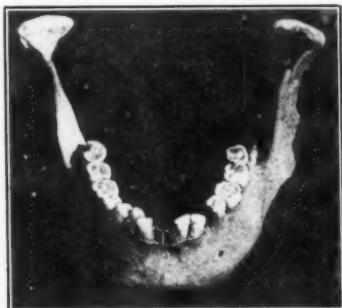


Fig. 15. The same, minus two Teeth.

anthropoid No. 11 was seen lying in its niche with the cover half off. Doubtless these two sarcophagi, at least, had been plundered. Sarcophagus *d*, in another part of G, had not been searched, for we found in it four gold ornaments; and it was evident that *e* and *f* had been undisturbed since the time when they were walled up in their small chamber.

The seventeen Phoenician sarcophagi, both the rectangular and the anthropoid, were all made of the same material, Parian marble. The *thecae* were like those which have been found in former excavations, massive, beautifully proportioned, very carefully adjusted, admirable works of art in every respect.⁶ One of them, *g*, taken from the western chamber of G,

⁵ *Mission de Phénicie*, pp. 472 f. The illustration in the text should be compared with our photograph.

⁶ See *Mission de Phénicie*, p. 427, and illustration; also Hamdy Bey and Th. Reinach, *Une Nécropole Royale à Sidon*, 1896, pp. 179-182.

deserves especial mention. More massive than any of its fellows, it was peculiar in that the receptacle for the body was cut in a shape approximating the anthropoid, rounded at the head, widest at the shoulders and tapering to the foot. It also bore the Phoenician letter *aleph*, carefully cut in one of the free spaces at the head; the letter doubtless designating the maker of the sarcophagus, or the atelier in which it was produced.⁷ The accompanying illustration (Fig. 16) shows the proportions of the sarcophagus

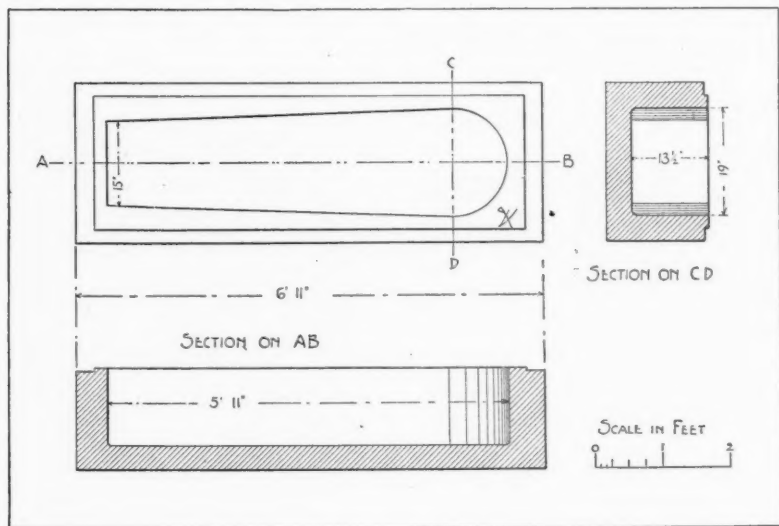


Fig. 16. Dimensions of Sarcophagus *g*.

and the position of the Phoenician character. Other makers' marks, Greek letters, on certain of the anthropoid sarcophagi, will receive mention in the sequel. It will be remembered that among the sarcophagi excavated by Hamdy there was a single specimen resembling our *g*, the only example of this type then known; it was not, however, of marble, but of a grayish stone of uncertain provenience. Reinach raises the question of relative date, but finds no means of answering it (*Nécropole*, p. 181), nor does our necropolis afford any evidence. All these unadorned *thecae*, in their

⁷ The minute Phoenician letters, *aleph* and *beth*, found by Hamdy on both body and cover of two of the sarcophagi excavated by him, were of a different nature, their purpose being to show to which sarcophagus each cover belonged (see *Nécropole*, p. 51).

A PHOENICIAN NECROPOLIS



Plate 1. Group of Anthropoid Sarcophagi.

A PHOENICIAN NECROPOLIS



Plate 2. Anthropoid Sarcophagus No. 11.

A PHOENICIAN NECROPOLIS

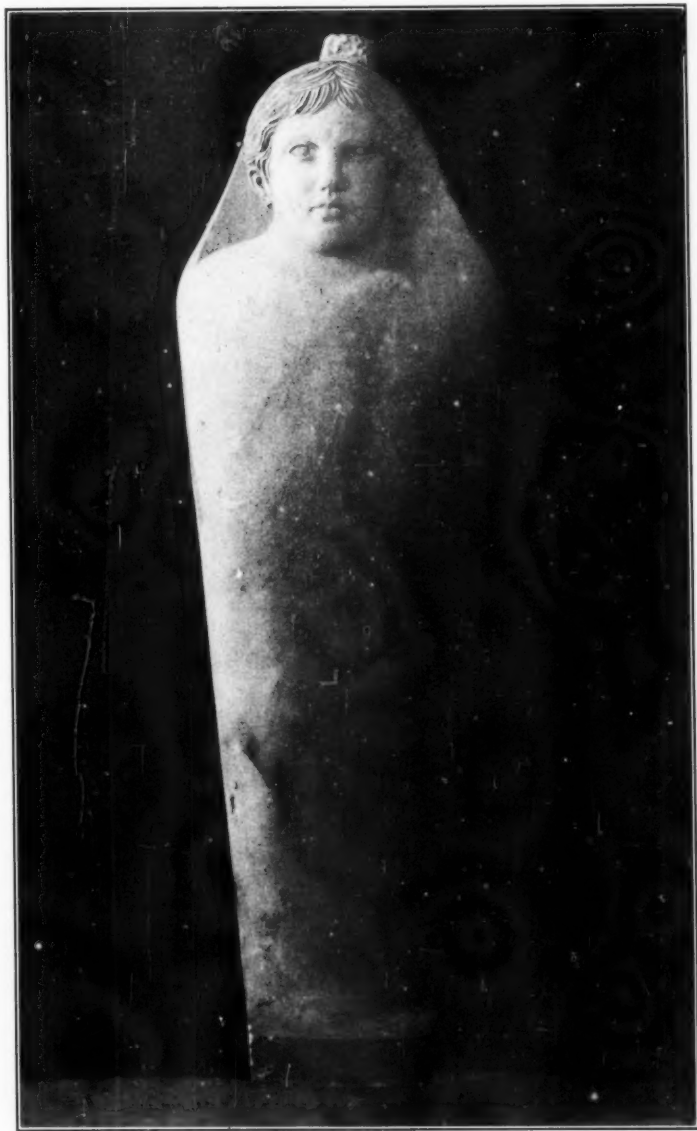


Plate 3. Anthropoid Sarcophagus No. 10.

A PHOENICIAN NECROPOLIS

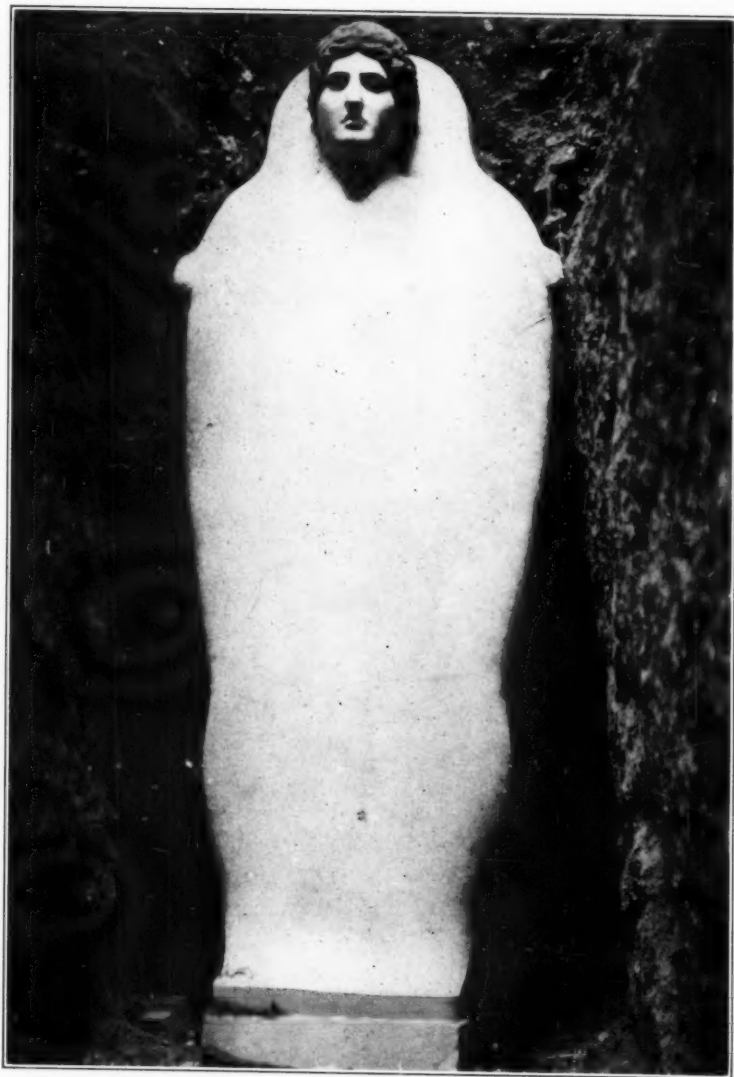


Plate 4. Anthropoid Sarcophagus from a Later Excavation.

slightly varying forms, are products of Greek art (more exactly, Greek art adapting Egyptian forms), and seem to have been popular on the eastern Mediterranean seaboard during a long period. It may be remarked that in our Tomb G it seems to have been the case that the *thecae* were put in later than the anthropoids. The use of the Phoenician letter as a trade

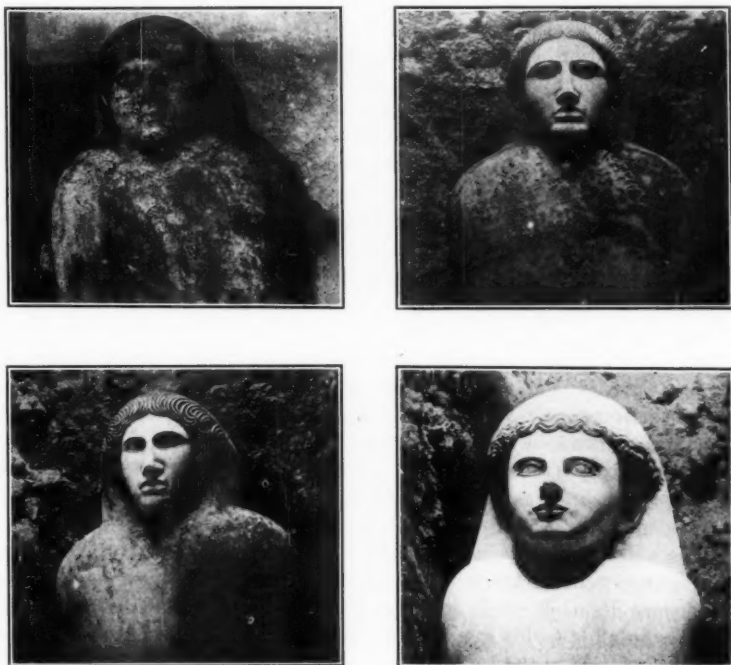


Fig. 17. Heads of Sarcophagi from 'Ain Hilweh.

mark may be taken as evidence that native craftsmen, taught by Greek masters, were engaged in the manufacture of these marble coffins.

The anthropoid sarcophagi of the necropolis deserve a fuller treatment than the brief summary given below. To the eleven which were found in the course of the excavation here described, others, eight or nine in all,⁸ were added from time to time in subsequent years, so that the whole collec-

⁸ I know certainly of eight, but have reason to think that this number does not complete the tale.

tion is now one of the two largest in existence. I have received photographs of the most interesting of these later finds, and make use of them here. Since I have not been able to learn the location of the tombs from which they were taken, nor any precise details as to form, size, and appointments of the latter, I could not include this part of the necropolis in my account. It is to be hoped that a later supplementary report will supply the needed information.

The anthropoid marble sarcophagus is now well known as a peculiarly Phoenician creation, employed by this one people during a definite period of time, and combining Egyptian and Greek elements in a way eminently characteristic of Phoenician art. Essentially an imitation of the Egyptian sarcophagus or mummy-case, it was developed by Greek artists and their native pupils into a highly interesting branch of sculpture in which some fine examples of the plastic art were produced, and in which polychromy played an important part. The details of the development are not yet clear, and relative dating is to a considerable extent a matter of conjecture. The available evidence seems to make it plain that the examples thus far discovered belong to the Persian and early Greek periods, that is, the range of time is from the early fifth century to the end of the fourth. In the attempt to date single specimens it may sometimes be doubtful whether certain peculiarities are archaisms or merely the clumsy conventions of unskilled artisans. On the other hand, the style of the best Greek schools is to be seen in some of these sculptured faces. During all this time Greek influence was very strong in Sidon. Sarcophagi of the same type and workmanship, in general, as those of Sidon, and apparently belonging to the same period, have been found in Sicily, Malta, Corsica, and at Cadiz in Spain, as well as at the principal sites on the Phoenician coast. The fullest and best treatment of the whole subject of anthropoid sarcophagi is that by Théodore Reinach (*Nécropole*, pp. 145-178, 350 f.; Plates XLV and XLVI), who adds to his general discussion not only a description of the eleven anthropoids in the Imperial Ottoman Museum at Constantinople and the twenty specimens in the Louvre, but also some account of every other example then known, forty-four in all, including the two in the Metropolitan Museum in New York City. See also Renan's *Mission*, pp. 404-407, 412-427, and No. LIX of the accompanying Plates; and for the Cadiz anthropoid, the *Revue Archéologique*, Vol. XXXIII (1898), pp. 328 ff. and Plates XIII-XV.

The following is a brief description of the anthropoids found in the excavation at 'Ain Hilweh, from notes made by me at the time.

No. 11 (see Plate 2). Length 6 feet, 11 inches; width at shoulders 2 feet, 10 inches. Shape of lower limbs indicated. Foot slightly rounded on the inner side (originally a conventional representation of the feet of

a mummy); cf. No. 6. Handles at shoulders and foot. A fine specimen of Greek sculpture of the best period. Every detail executed with great care, including even the handles. The relative width of the sarcophagus marks this as a comparatively early specimen, and the position of the head, between the shoulders and only partially detached from the oval of the massive lid, is a distinct archaism reminding of the Egyptian representations. The hair is arranged in an ornamental roll (in imitation of an Egyptian style) completely covering the ears. The squarely modeled face and the heavy under jaw suggest the school of Polyclitus. An extremely fine example of polychromy, the colors surprisingly well preserved in spite of the adverse conditions through so many centuries. Hair dark red (very nearly "Indian" red); face flesh-color, the paint mostly washed off; lips vermilion, brightest within; white of eyes tinged with blue, vermilion in inner corners; iris rich brown, the outer circle outlined in black (or very dark brown), the pupil also black; eyelashes on both lids indicated with fine lines. No trace of color on the body. This sarcophagus was the first occupant of G west. It was in order to make room for the two rectangular *thecae* that the niche was cut into which it was moved.

No. 10 (see Plate 3). Length 6 feet, 6 inches. Handles at head and foot. Excellent Greek sculpture, though the treatment of the hair seems to show a trace of Asiatic influence; cf. Nos. 6, 8, and 9. Most of the color washed away; no traces on the hair, in particular. Lips red; white of eyes tinged with blue; apparently the iris had been blue, outer circle almost black. What gives this specimen extraordinary interest, however, is the obvious suggestion of portraiture. The face is not conventional, like all the other known examples of this branch of art; it is on the contrary distinctly individual. Note the crease in the forehead at the meeting of the brows, and the good-humor in the modeling at the corner of the mouth and just above. The two eyes differ from each other in shape and expression, as in a living person, and the manner of this difference is convincingly realistic. Here also, as in No. 11, there is a certain conventional heaviness in the style. The only relation hitherto observed between the "anthropoid" head and the occupant of the sarcophagus is this, that whenever the representation is masculine (as shown by the features and especially the arrangement of the hair), the bones found within the coffin are those of a man; if the face and hair are plainly feminine, the bones are sure to be those of a woman. Whether sarcophagi of this nature were ever made expressly for certain individuals, and to some extent were given a corresponding individual fashion, we do not know.⁹ In this case, at all events, it seems plain that the sculptured face, if not that of the occupant of the coffin, was at least that of some living boy or youth whom the artist took for his

⁹ See however the note below, in the description of No. 7.

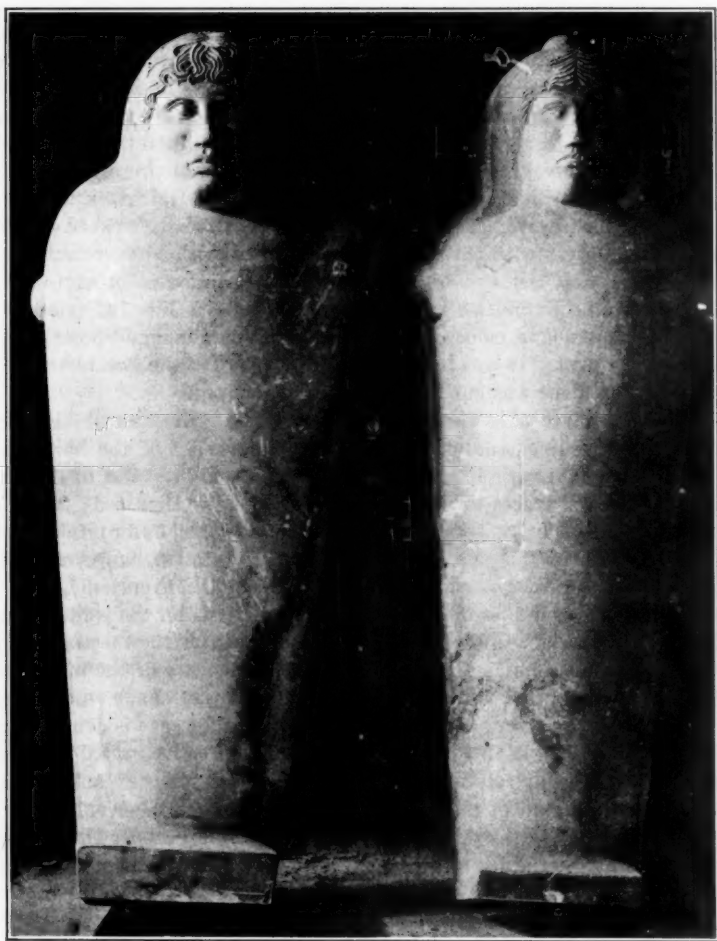


Fig. 18. Sarcophagi Nos. 8 and 9.

model.¹⁰ The most probable date of No. 10, as of No. 11, seems to be the latter part of the fifth century.

Nos. 8 and 9 (see Fig. 18). The original occupants of I east. No. 9 is the sarcophagus of a woman, presumably the wife of the occupant of No. 8. These two and Fig. 17, No. 1 (from a later find) evidently came from the same workshop.

Length of No. 8, 6 feet, 11½ inches. Handles at shoulders (unsymmetrical) and foot. Very heavy and archaic.¹¹ Hair reddish brown. No other distinct traces of color. In this sarcophagus was found a seal ring of gold, of excellent Greek workmanship; also the specimen of dentistry, and the remnant of linen cloth mentioned above. Doubtless the bodies in all these sarcophagi were at least partially embalmed. On the small knob at the foot was the Greek letter Δ.¹²

Length of No. 9, 6 feet, 10 inches. Handles at shoulders and at head and foot. Some indication of the neck. Hair dark red; faint traces of blue in the free spaces on either side of the neck. All other traces of color washed off. Nose and lips chipped, and (much more noticeable) the iris of each eye chipped out. This seems hardly accidental; doubtless the work of an enemy. The Greek letter Α on the projection at the foot.

No. 6 (see Fig. 19). In the same tomb with No. 7. Length 6 feet, 11 inches. Handles at head and foot. Foot rounded on the inner side (see No. 11). A broad band falling from the shoulder on either side, a curious Phoenician adaptation of the familiar Egyptian *klaft* (*Nécropole*, pp. 148 f.). Head and face clumsily executed. Nose very flat. The treatment of the hair shows the tendency to arrange it in separate locks in successive layers in the manner customary in the sculpture of Western Asia for more than two thousand years. The same tendency appears in Nos. 8 and 9, and less distinctly in No. 10. Hair dark brown; free spaces on either side of head black; band around the hair vermilion; vermilion in corners of eyes and on inner side of lids. All other traces of color washed away; and the colors just mentioned were all indistinct excepting that of the band about the hair.

No. 7 (middle standing figure in the background, in the group). Similar in size to No. 6, and also rudely executed. Handles at head, foot, and shoulders. All colors somewhat indistinct. Hair dark brown; band about

¹⁰ Here, perhaps, we may see more definitely the influence of Polyclitus, namely of his statues of boy athletes who had been victors at Olympia.

¹¹ The weight of this sarcophagus cover approximates half a ton. We loaded it on the back of a kneeling camel (as we had done with success in several other cases), but he refused to rise with it, so we had to transfer it to an ox-cart.

¹² I did not note, either here or in the other cases, Nos. 9 and 3, any corresponding mark below on the foot of the sarcophagus. Possibly this was an oversight on my part.

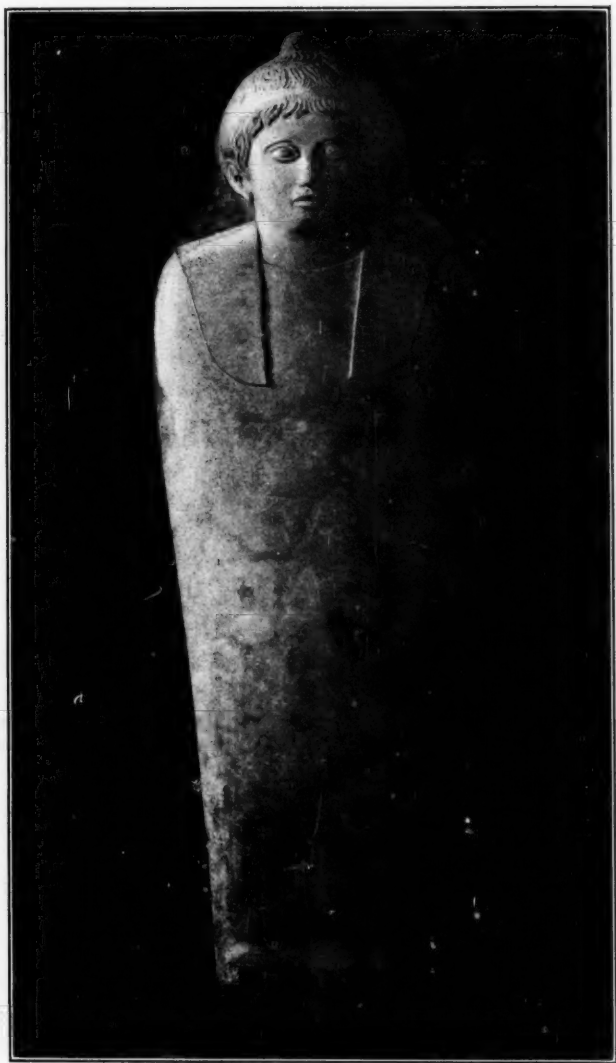


Fig. 19. Sarcophagus No. 6.

the hair dark red; *face apparently rich brown*,¹³ free spaces on either side of the head bright blue; inner corners of eyes vermillion. No other traces certain.

No. 5 (standing figure at the right, in the group). From F west. Handles at head, foot, and shoulders. Apparently the coffin of a child. Clumsily executed. Head hardly detached from the body of the sarcophagus cover; cf. *Mission de Phénicie*, Plate LIX, Nos. 5 and 6; *Nécropole*, Plate XLVI, No. 81. No traces of color remaining.

Nos. 2, 3, and 4 occupied a single tomb-chamber, F east. The three came from one workshop, in all probability. They are of unusual length, and show the same characteristics of workmanship; the noses, in particular, are noticeably long and sharp. Constantinople No. 91 (*Nécropole*, Plate XLV) may have come from the same manufactory, as the style is very similar in most respects. It was found near Miumiyeh, close by 'Ain Hilweh. These all seem to belong to a later stage of development than that illustrated in Nos. 8-11; I accept without hesitation Reinach's dating, the fourth century. Nos. 6 and 7 perhaps date from the latter part of the fifth century.

No. 2 (next to last in the horizontal row). Length 7 feet. Handles at head, foot, and shoulders. Style mediocre. Nose remarkably long; neck indicated in its full length. Band about forehead just below the hair. No plain traces of color.

No. 3 (between Nos. 6 and 2 in the horizontal row). Length 7 feet, 5 inches. Handles at shoulders. Style not unpleasing; more carefully executed than No. 2. Hair reddish brown; band about the hair *apparently* left uncolored; scalp back of hair finished in a sort of rice-grain work, same color as hair; white of eyes tinged slightly with blue; outer circle of iris dark; dark red eyelashes indicated with fine lines. The mark X on the foot. Sarcophagus of a woman.

No. 4 (last in the horizontal row). Sarcophagus of a woman. Length 7 feet, 4 inches. Handles at head, foot, and shoulders. Head in high relief. Features small and well cut. Hair and scalp dark red; rice-grain finish of the scalp as in No. 3, but finer, almost smooth; head-band apparently left uncolored; traces of vermillion in corners of eyes and under lids. Other painting no longer to be seen.

No. 1 (standing in back row). Sarcophagus of a woman. Lower part of cover broken off. Handles on either side of head, and at one shoulder. Hair dark red; no other distinct traces of color. Work of the early fourth century; It is thoroughly Greek, fairly well executed.

¹³ I find in my notes the query, whether the wealthy noble or high dignitary who was interred in this coffin may not have been of African descent. The treatment of the hair (tightly curled) and the unusually thick lips might seem to lend support to this precarious theory.

Among the later finds at 'Ain Hilweh, it is evident that Fig. 17, Nos. 2 and 3 are from the same hand. The style is clumsy, suggesting native pupils rather than Greek artists. No. 4 in this group would date from the fifth century, according to Reinach's criteria. The base of the sarcophagus (not shown here) has the deep undulations corresponding—in the manner of this curious convention—to the human form (*Nécropole*, p. 167). By far the most interesting of these subsequently excavated sarcophagi is the one shown in Fig. 7 and Plate 4. It is a noble specimen of Greek sculpture of the best period. I am sorry not to have seen it, nor to be able to describe it more fully. Plate 1 shows the group of sarcophagi as it had been slightly augmented a few years after the first excavation. The order, from left to right, using the enumeration already given and designating the later additions by "add.", is as follows: 4, 8, add., 3, 2, 10, 11, 6, 5, 7, add., 9, add., 1.



Fig. 20. Fragment in Ivory.

The figurines which we found in the tombs were generally crumbling to pieces, so that only fragments could be rescued. All of them had been colored, but little of the color remained. The goddess with outstretched arms (Fig. 11, above) was painted white; the image of Bes, below, was in two colors, crimson and light blue; on the detached head, above on the right, the two colors scarlet and deep blue could be seen; the standing female figure below, at the left, was red. The height of this last-named statuette is $7\frac{1}{8}$ inches. These images and fragments all came from the western chambers of F and G. From F west came also the fragment of an ivory relief of the Phoenician Astarte, executed in the familiar Egyptian style (Fig. 20).

The pottery had been so damaged by centuries of soaking that it was mostly either found in fragments or else came to pieces when handled. The larger alabastra (Fig. 21), the tallest $8\frac{1}{4}$ inches in height, were taken from Sarcophagus d; the small one came from H east.

The lamps of ordinary pattern (Fig. 12, below) belonged to the late Roman burials in A. The two "folded" lamps (one a fragment), above,

were found in D and F. The larger ointment pyxis (middle), in black glazed ware, was taken from D west; the other specimens of this ware came from the two chambers of F.¹⁴ The two-handled saucer (one handle missing) with the lotus decoration (left hand, below; see also Fig. 22), carved from a light green stone, was evidently buried with Sarcophagus 9, for it was found between it and the adjacent wall of the tomb.

The small Egyptian images in bluish green faience (Fig. 23) were found in I west, with the exception of one, which, with the larger of the two



Fig. 21. Alabaster.

scarabs, came from K west. For a description of the similar images found by the French expedition of 1860 see *Mission*, pp. 487 f. From K west came also a gold seal ring, with a stone of inferior Greek workmanship, and a small gold earring of the very common Phoenician type.

The bronze objects (Fig. 13) were for the most part badly corroded; two or three of the nails, including one 9 inches in length, were well preserved. It was impossible to tell whether the mirror ($4\frac{5}{8}$ inches in diameter) had been decorated in any way. These all came from D west; one or two nails were also found in the eastern chamber. The bracelet, or anklet, was

¹⁴ Cf. the examples described by Renan, *Mission*, p. 490.

taken from E west; and the cylinder—perhaps originally inscribed—from the eastern chamber of A. From the latter chamber came also the bone pencil for applying antimony (above, right hand).

All the fruits of the excavation, sarcophagi and minor objects, have been exhibited from time to time, but to comparatively few and with inadequate facilities for examination. The problem of making suitable use of these important works of art has not been easy. Constantinople already had more anthropoid sarcophagi than it had room for, and was disinclined to import additional specimens; nor would the owners of the Sidon property readily have agreed, under the circumstances, to relinquish without compensation

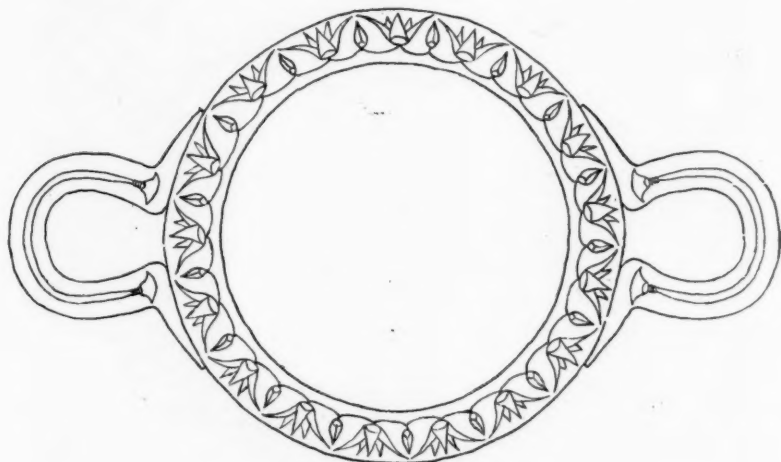


Fig. 22. Decoration of Toilet Saucer.

the best of their collection. A high officer of the Imperial Ottoman Museum, himself a very learned archaeologist and an experienced excavator, who was in Sidon shortly after the unearthing of these antiquities, expressed keen interest in the find, and after conference with the owners suggested to them that they might apply for authorization to make their collection a local branch of the Museum in Constantinople. They, however, while appreciating the courtesy of this suggestion, felt unequal to the burden which the undertaking would involve, and also hesitated to take a step which might eventually put them at the mercy of local officials. They therefore preferred to bide their time and to make no public announcement. It is to be hoped that it may soon become possible for the students and friends of ancient art to make full use of these treasures of old Phoenicia.



Fig. 23. Small Egyptian Images in Faïence.

THE MODERN WALL OF JERUSALEM.

By HINCKLEY G. MITCHELL.

Tufts College.

1. *Introductory.*

The wall of Jerusalem impresses the most casual observer. To the student it is full of interest, for he sees in it a record of the vicissitudes through which has passed one of the most famous cities in the world.

This remarkable wall became an object of increasing attractiveness to me when, in 1901-2, I enjoyed the privilege of spending several months in Jerusalem as Director of the American School for Oriental Study and Research. I first made a study of one period in its history, that of its restoration under Nehemiah, the result of which was a paper published in the *Journal of Biblical Literature*, 1903, Part ii.

While I was collecting material for that paper I became somewhat familiar with the variety in the masonry of the wall, and it occurred to me to take photographs showing, not only its general features, such as its zigzag course and the gates and towers with which it is adorned as well as strengthened, but also details of size and finish, or lack of finish, among the stones of which it is composed; details which might prove valuable to myself or others in a future discussion of its chronology. If I then had a half formed plan to undertake such a discussion, the lapse of time and the intrusion of "other things" have so far changed my mind that I am now content simply to present my pictures and such other material as I have collected, leaving it to some one who has more leisure and more knowledge of archaeology, but who may not have been permitted to see the actual wall, to interpret them. For the use of Pls. 64, 65, and 66 I am indebted to Professor L. B. Paton.

The treatment now proposed includes a discussion of the general features of the wall, one of which is the irregularity of its course. In the first place, it is an irregular quadrilateral which looks as if its builders deliberately dodged the cardinal points, since none of its sides or corners looks squarely toward one of them. Moreover, in its circuit of almost two and a half miles,¹ except where it coincides with the wall of the Haram, there is not an unbroken stretch of any considerable length.

¹ More exactly, according to the figures given by Robinson, 2,458 miles, measured "as closely as possible," "yet without regarding the short angles and zigzags." The successive posts, as given, *Resarches*, i. 395, measure:

Jaffa Gate to Southwest Corner.....	1400 feet
Southwest Corner to David's Gate.....	600 "

The wall varies also in height and thickness, and much more in the former respect than appears above the present surface; for it must be remembered that the present city lies across two ridges each of which is nearly cut in two by a lateral ravine, that the variation in surface of the underlying rock amounts to more than two hundred feet, and that the builders also had to take account of the character of the external terrain. It would therefore be strange if Baedeker were correct in describing the wall as $38\frac{1}{2}$ feet in height.² Indeed, Tobler does scant justice to it when he says³ that "its height is unequal to a considerable degree"; or Robinson⁴ when he sets the lower limit at 20 and the upper at 50, or, at the southeast corner of the Haram, 60 feet; the fact being that the wall at this corner rises $77\frac{1}{2}$ feet above the present surface and its total height is 157 feet 11 inches,⁵ nearly all of which was originally exposed to sight. Toward the northeast corner of the Haram, where the wall crosses the lateral ravine above mentioned, it is about 166 feet high, but at this point only 4 or 5 feet, and at the corner itself only 65, more than now appears, were meant to show above the surface.⁶ Naturally, the wall would be made especially strong where the ground outside, at the northwest corner of the city, for example, favored an attacking force, but less masonry would be required where, as at the northeast corner, it was built on a considerable scarp.

The wall of Jerusalem has eleven gates, including a modern (1889) one at the northwest corner and four, now closed, which formerly gave entrance to the Haram. The remaining six are so placed as to serve persons leaving

David's gate to Dung Gate.....	1700 feet.
Dung Gate to Southeast Corner of City.....	500 "
Southeast Corner of City to Haram Wall.....	290 "
Haram Wall to Southeast Corner.....	630 "
Southeast Corner to Golden Gate.....	1045 "
Golden Gate to Northeast Corner of Haram.....	483 "
Northeast Corner of Haram to Stephen's Gate.....	200 "
Stephen's Gate to Northeast Corner of City.....	1062 "
Northeast Corner to Herod's Gate.....	1000 "
Herod's Gate to Damascus Gate.....	1200 "
Damascus Gate to Northwest Corner.....	1990 "
Northwest Corner to Jaffa Gate.....	878 "

The East side of the Haram, according to Conder, *The City of Jerusalem*, 125, measures 1530 feet, the West side 1601, the North end 1042, and the South end 922 feet.

² *Palestine and Syria*, page 31.

³ *Topographie*, 62.

⁴ *Researches*, i. 385, 421.

⁵ *Survey of Western Palestine, Jerusalem*, 146, 148.

⁶ S.W.P., *Jerusalem*, 127, 134. On the southwest corner of the Haram, see Warren, *Recovery of Jerusalem*, 332 f.

the city by the principal streets or approaching it by the natural lines of travel. These six, although they differ in external appearance, are all built on the same general plan, namely, that of a room with two doors, one for ingress the other for egress, so situated as to be at an angle with each other, and thus more difficult for an enemy to pass than a single door or two directly opposite each other. The doors are generally in adjacent walls, so that one is required to turn squarely to the right (2) or the left (3); but in the Damascus Gate, though in opposite walls, they are not directly over against each other.⁷ The following are the gates in their order, commencing on the west of the city and turning to the south, with the width, in every case but one, of the outer entrance:

Jaffa Gate	11 ft. 11½ in.	Golden Gate	31 ft. 11 in.
David's Gate	10 " 7 "	Stephen's Gate	10 " 10 "
Dung Gate	4 " 5½ "	Herod's Gate	5 " 4½ "
Double Gate (hall)	42 "	Damascus Gate	14 " 7½ "
Triple Gate (each)	10 " 1½ "	(New Gate	13 " 2 ") ⁸
Single Gate	9 " 4 "		

Five of the gates project beyond the line of the wall, and therefore, although they are little, if any, higher than the wall, they have, at a little distance, the appearance of proper towers, of which there are a considerable number located at irregular intervals about the city. These towers are described by Tobler⁹ as follows: "They are all squares or rectangles at the base. Their width varies from 6 to 24 paces. They project from the wall from 6 to 14 paces." He adds that few of them rise much, most of them but little, above the height of the wall. He counted 34 of these towers. Baedeker copies his figures,¹⁰ but in such a connection as to misrepresent their author, for he gives the impression that this number is exclusive of the projecting gates, whereas Tobler includes them all, three expressly. This seems the necessary interpretation of his enumeration,¹¹ since it is

⁷ This description applies to the gates as built. Two of them, Stephen's and Herod's, have in recent years been altered, the former by cutting a door through the inner, the latter by cutting one through the outer, wall of the tower, to permit carriages to pass in and out.

⁸ For other names by which all these gates, except those in the wall of the Haram, are known, see Baedeker's *Palestine and Syria*, 31 f.

⁹ *Topographie*, 65 f.

¹⁰ *Palestine*, 31.

¹¹ Tobler's figures in detail are:

Jaffa Gate to Dung Gate.....	10 towers.
Dung Gate to Golden Gate.....	1 "
Golden Gate to Northeast Corner.....	5 "
Northeast Corner to Herod's Gate.....	3 "

impossible to find ten between the Jaffa and the Dung Gate without counting the latter as well as two in the Citadel, or five from Herod's to the Damascus Gate without including the two by which the latter is flanked. If, now, these five gates be deducted, the remainder will be 28; but, since Tobler seems to have overlooked three of the five between the northeast corner and Herod's Gate, it will be more nearly correct to say 31. Tobler cites Prokesch as placing the total at 40; and this number can be obtained by including all the (seven) ancient gates (with eight towers) and the Tower of David.

Finally, in this connection should be mentioned the flankers, that is the elbows, so to speak, in the wall, by which its general direction is not changed, but space is made, as by towers, for loopholes and battlements from which the besieged can enfilade an attacking party. These half-towers, as Tobler calls them, "project from one to ten paces," the most prominent being those on either side of the northwest corner; and, as there are about twenty of them, they must have added considerably to the strength, as they now do to the picturesqueness, of the wall.¹² See the map.

I might now proceed at once to a description of the masonry of the wall—in fact, I did so in the first draft of my paper; but I have learned that it is impossible to read aright the records in these stones great and small, and appreciate their significance, without more or less knowledge on related subjects. These subjects may be grouped under two general heads, the first dealing with the materials and construction of the wall and the second with its history.

2. The Wall in the Making.

Under this head something must first be said concerning the nature of the material used in the wall. The rock underlying Jerusalem and its environs is described by geologists as *cretaceous limestone*, of which there are several varieties. The layer generally nearest the surface is "a hard, reddish-grey, silicious chalk, with bands of flint," called by the natives *mizzi* or *mizzi helu*, and much used in building, especially when strength and durability are desired. It is recognizable by the sharpness of its edges or the clearness of the toolmarks on its finished surface.

Beneath this layer of *mizzi*, which is comparatively thin, there is a thicker one in which the stone is soft and has a rosy-white color, with rare bands of flint. It is popularly called *melekeh*. This is the layer in which have been cut most of the tombs and cisterns in and about the city, the overlying

Herod's Gate to Damascus Gate.....	5 towers.
Damascus Gate to Northwest Corner.....	5 "
Northwest Corner to Jaffa Gate.....	5 "

¹² *Topographie*, 66.

mizzi furnishing the roofs when roofs were an object.¹³ The stone from this layer also is used for building because it is very easy to work, when first quarried, but becomes comparatively hard on being exposed to the air. It never, however, becomes as hard as *mizzi*, and therefore does not retain as long as the latter sharp outlines or fine toolmarks.

Next below the *melekeh* is another layer of hard stone, variegated in color, which comes to the surface near the Convent of the Holy Cross, west of Jerusalem, and which therefore is sometimes called *Santa Croce marble*. It is also sometimes called *mizzi*, the natives distinguishing three varieties, all of which, in spite of their hardness, are used in building, especially for the finer architectural details.

The stone found in the wall of the city is mostly *mizzi* or *melekeh*, but in the later repairs the material used is sometimes a nummulite limestone popularly called *kākūleh*, found in the layer above the *mizzi* where it comes to the surface on the Mount of Olives. It is a soft, yellowish stone containing fossils, less valuable for important buildings than either of the preceding.

It is hardly necessary to emphasize the importance of the matter of the nature of the material employed in the wall. It is clear that stones of different degrees of hardness will not wear uniformly, and that in studying the age of a structure in which such material is employed this fact must not be overlooked.

Reference has just been made to the localities where two kinds of stone, *kākūleh* and *Santa Croce marble*, have been and are obtained. It has also been intimated that the other two, *mizzi* and *melekeh*, are and always have been obtainable everywhere about Jerusalem. The fact is that one cannot go from the city in any direction without coming upon quarries, some of them being in the shadow of the wall, while one is under one of the enclosed ridges; for the fosse along the northern end of the east wall (Pl. 36) and a great part of the length of that on the north (Pl. 43) probably furnished material for the wall itself; and the Cotton Grotto (Pls. 67, 68) and the Grotto of Jeremiah are witnesses to the method by which the ridge which once filled the space between them was removed. There are other quarries in the vicinity; for example, a little way from the northeast corner of the city; in the village of Silwān; on the road to the railroad station; and in front of the Russian cathedral; and there are still others at a little distance, especially in the direction of the tombs of the Judges. See Pl. 70.

¹³ The graves of "Joseph of Arimathea and Nicodemus" (?) in the Church of the Holy Sepulchre are exceptional, being so shallow that in excavating them the workman did not get through the upper layer. See *Ordnance Survey of Jerusalem*, 50.

These and other quarries were doubtless the sources from which stone for the wall, as required for original erection or subsequent reparation, was procured. They reveal the methods employed in procuring it. For example, in the Cotton Grotto the walls are scored with vertical grooves (Pl. 67), which mark the width of stones that have there been quarried. The workman began by cutting downward, with a two-handed pick, two of these grooves, separated from each other by the width of the desired block, and then driving them to a depth equal to the thickness of the same. Finally, he drove wooden wedges into the grooves and kept them wet until, expanding, they forced the block from the wall. There seem to be no indications that any other force was applied for this purpose.

This was not the only method of quarrying among the Hebrews, as appears from the picture of the quarry in the Russian compound, showing a column 40 feet long and 5 feet in diameter, lying as it was left, attached to the horizontal layer of which it had been a part, when the defect in it was discovered (Pl. 69). In this case a different method was employed; partly, no doubt, because so long a stone could be more safely and conveniently handled in a horizontal than in a perpendicular position, but also because *mizzi* was required, and the layer of this quality about Jerusalem was a good deal less than 40 feet in thickness.¹⁴ It seems safe, in advance of positive proof, to take for granted that very large stones were usually, if not always, quarried in this way,¹⁵ and that sometimes at Jerusalem, as at Baalbec, both methods were practiced at the same time in the same quarry.¹⁶

Here, again, it will be worth while to dwell a little on the bearing of the facts discussed on the character of the wall. It is clear that, had the column in the Russian compound been used, as it might have been, in or about the temple, the line of cleavage would have been vertical, and it would have been more apt to scale or split than if the grain ran horizontally. On the other hand, a long block for the wall would naturally be laid on its quarry bed, unless it was thin, when a mason might be tempted to set it on edge, thus securing a larger face, but, as in the case of the column, one less resistant to wind and weather.

There is more to say about stones quarried by the vertical method. They seem generally to have had the form of slabs. One in this form might be used as a whole, in which case it would naturally be laid lengthwise in the

¹⁴ Hull, *DB*, art. *Geology*, says only 16 feet.

¹⁵ Maudslay's Scarp, so-called, in the Protestant Cemetery, to judge from the lines on the face of it was produced by the same process. See Bliss, *Excavations at Jerusalem*, 12 f.

¹⁶ In the quarry at Baalbec may be seen to this day the greatest block of stone (71 x 14 x 13 feet) man ever attempted to utilize, lying half-freed from its sloping bed, and, near it, two smaller ones, separated from each other by a workman's pick, but left standing fast on their original foundation.

wall, on one of its four sides; but, in whichever way it was laid, the grain would have a vertical direction.

Large stones quarried by either of these methods were doubtless sometimes broken into two or more pieces, or such small blocks taken directly from the quarry. They might be laid in many different ways, in some of which the grain would run horizontally. One of these latter would be chosen by the intelligent and conscientious workman. The fact that they are not all laid in this way is pretty good evidence that all the masons who wrought on the wall did not possess both of these characteristics.¹⁷ See Pl. 35.

Some of the stones now in the wall were delivered to the masons and put into their places as they were broken from the living rock, or, at most, after the removal of ugly or inconvenient protuberances; but many more had first to pass through the hands of the stonecutter. One naturally wonders where and how the work on them was done. In 1 Kgs. 6:7 the statement is made that the temple "was built of stone made ready at the quarry, and there was neither hammer nor axe nor any tool of iron heard in the house while it was in building." This statement, being an editorial addition to the passage in which it is found, is of doubtful value for the time of Solomon, but it may be taken as evidence concerning the practice of the editor's day. It is therefore probable that some, at least, of the stones of the present wall were finished at the quarry. Perhaps this inference is strengthened by the fact that, when Warren was excavating about the Haram, although he was continually annoyed and sometimes temporarily thwarted, in his operations by what he calls "shingle," he says in one of his reports¹⁸ that the small stones of which the shingle consisted were "not long chips, but cubical or nearly hemispherical"; and in another¹⁹ that they were "in many cases rounded and unlike what would result from stonedressing, having more the appearance of the backing used in the walls at the present day in Palestine."²⁰

¹⁷ Perhaps it is worth while, in this connection, to mention a matter of statistics. Warren in the course of his excavations about the Haram sank twelve shafts between Wilson's Arch, on the west side, and the northeast corner, and measured 195 times the courses above and below the surface. The average thickness of the stones measured was 3 feet 7.95 inches, there being 65 less than 3½, but only 7 less than 3 and only 4 over 4 feet thick. A favorite figure is 3 feet 9 inches, which occurs thirty times.

¹⁸ *Recovery of Jerusalem*, 58 f. See also 176.

¹⁹ *Recovery of Jerusalem*, 144.

²⁰ There is very little, in the reports on the excavations made at Jerusalem, on the backing used in its wall, but Wilson, in *Ordnance Survey of Jerusalem*, 26, says of stones at the southeast angle of the Haram that they "form a species of ashlar-facing to a mass of rubble"; in which perhaps he had in mind the spot shown in Pl. 26, a picture copied from a photograph taken well back toward his time.

The question just raised might have been omitted, since it could make little, if any, difference in the wall where any of the stones composing it were finished; but there remains a point which is of some importance. It has to do with the posture of the workmen who dressed the stones. An occidental stonecutter blocks up the stone which he has to dress and stands over it while he plies his tools. Now, it is not the custom in Palestine to stand while doing anything which can be done sitting. Thus, not only do women wash, spin, etc. on the ground, but men, as is shown in Pl. 71, contrive to cut stone after a fashion in the same posture. One would think it very uncomfortable for the workman, and preventive of such good work as he could do while standing over the stone and moving freely about it. This being a plausible supposition, if, as the persistence of the customs of the East seems to warrant one in believing, the workmen who dressed stone for the wall of Jerusalem also sat, when they could, at their work, the question arises whether there are not peculiarities, irregularities, etc., especially in the finish of the smaller stones, which can be explained by the posture of the workman.

3. *The Wall in its Vicissitudes.*

In the preceding pages attention has been directed to the more influential conditions under which the limestone underlying Jerusalem and its environs was transformed into a means of defense which was at the same time an ornament to the city. But the wall, in its original extent and character, had hardly been completed before it began to be attacked by forces the effect of which, sometimes by slow and sometimes by more rapid processes, would be to mar and eventually to destroy it.

Among these hostile forces, of course, are the elements; but it is not necessary to go into a detailed description of the effect on limestone of meteorological phenomena with which men everywhere are familiar. There is, however, one peculiarly effective agency of this kind, the sirocco, which should not be passed over in silence.

The city of Jerusalem, being situated on a ridge, parts of which are here more than 2500 feet above the level of the sea, is naturally exposed to every wind that blows. Some of them in time do more or less damage to any structure, even of stone. This is true of the west or northwest wind, in winter, with its clouds and rain, but especially of the dreaded east or south-east wind, which oftenest blows in the early fall, usually for from one to three days, but sometimes much longer.²¹ It frequently brings only almost intolerable heat, intensified by reflection from angry, threatening clouds, from which man and beast seek the nearest shelter. See Is. 25:5. In its

²¹ Grant, *Peasantry of Palestine*, 25 f.

most vehement form it is a roaring hurricane, laden with dust and sand, which it hurls at any barrier in its course with a force that rends and rives trees and carries everything movable before it.²² It is evident that, in the study of the wall, the possible effect of this periodical sandblast must be recognized as an important element in any chronological calculation that may be attempted.

Wind and weather are not the only natural forces from which the wall has suffered. Palestine, it must be remembered, is a volcanic region. From time immemorial, therefore, it has at intervals been visited by earthquakes, some of which have been very destructive, especially on the seacoast and in the Jordan Valley. The elevated backbone of the country has been shaken less frequently and disastrously, but there have been shocks even in this region by which not only walls and buildings, but men and animals in large numbers, have been destroyed. The Old Testament gives abundant testimony to the familiarity of the Hebrews with these visitations. Amos speaks of them as a recognized form of divine chastisement (4:11), and he and others predict their recurrence for this purpose. See Am. 2:13 ff.; Zeh. 14:4. It was an earthquake by which, according to 1 Sa. 14:15, Yahweh supported Jonathan's valorous adventure among the Philistines at Michmash; but the one that seems to have made the deepest impression is that "in the days of Uzziah," doubtless the same that is cited in the title to the book of Amos as well as in Zeh. 14:5.²³ Among those of earlier centuries which are known to have disturbed Jerusalem and its wall are those of 362, 746, 1016, and 1034 A. D. The damage done by the last to the walls of the Haram was immediately repaired by the Caliph Az-Zāhir, as recorded in a mutilated inscription on the battlements near the southeast corner.²⁴ The other earthquakes, or the repairers after them, doubtless left traces, but they are not so easily located.²⁵

The ravages of natural forces have doubtless been serious, but the agents whose work on the wall is most marked and confusing were men who, in the successive generations, wrecked or rebuilt and extended it.

The hands of these men appear in the changes that have been made in the course of the wall. The fact is that the present wall is the relic of a system which, as time passed, had to be adapted to the size and convenience of the population. The first of this system of walls was the one which

²² Jer. 4:11; Thomson, *The Land and the Book*, ii. 262.

²³ Josephus (*Antiquities*, ix. 10, 5) connects it with the invasion of the temple by the king (2 Ch. 26:19), and gives it a description evidently suggested by Zeh. 14:4.

²⁴ De Vogüé, *Le Temple de Jérusalem*, 77; LeStrange, *Palestine Under the Moslems*, 101.

²⁵ Bliss found what he was inclined to consider the work of an earthquake in a tower which he excavated (*Excavations*, 77). Perhaps the defect in the rejected column in the Russian compound is another example. The workmen would hardly have gone as far with it as they did if the defect could have been seen when they began.

encircled the ancient city of Jebus. That city, it is now pretty generally conceded, occupied the southern end of the eastern of the two ridges across which the walled city now stretches, its site having been determined by the location of a spring, the Gihon of 1 Kgs. 1:33, now called the *Spring of the Steps* or the *Spring of the Lady Mary*, on which the people depended to a greater or less extent for water. The population of the city must have increased rapidly after David captured it and made it his capital. At any rate, Solomon, in his reign, was obliged to extend its limits, not only toward the north, where he had erected a temple for Yahweh, and for himself a group of palaces, but also toward the west, where there had grown up a flourishing suburb. See 1 Kgs. 3:1. In process of time the whole of the southern end of the western ridge became a part of the city, with a north wall running from a point near the present citadel to the precincts of the temple, the so-called First (north) Wall.

Later there grew up, across the ravine on the other side of this wall, another suburb, around which in due time was thrown the so-called Second Wall, whose eastern end extended to the northeastern corner of the temple precincts. This must have been built before the reign of Ahaz, for one of the first things done by this king was to connect the Upper Pool, now sometimes called the Pool of Hezekiah, with the one at the head of the Valley of Hinnom the modern name of which is the Pool of Mamilla;²⁶ and there would have been no object in so doing if the Upper Pool had not then been inside the city. Indeed, there is ground for believing that this second wall was of a considerably earlier date, since in 2 Kgs. 14:13 Jehoash, king of Israel, is reported to have broken down the wall "from the Gate of Ephraim to the Corner Gate, four hundred cubits"; and the Gate of Ephraim was in the First Wall, but the Corner Gate, according to Je. 31:38, was at the northwest corner of the city of the prophet's day, and therefore in the Second. In other words, the Second Wall must have been built as early as the reign of Amaziah (799-771).²⁷ It is also probable that, since in Is. 8:6 there is a reference to the Siloam Tunnel, this work should be credited, not to Hezekiah, as it is in 2 Kgs. 20:20 (comp. 2 Chr. 32:30); but to an earlier king; as also the extension of the limits of the city to include the southeastern end of both ridges and the whole of the intervening Tyropoeon Valley. These errors in the Jewish annals may be explained as result of a pious prejudice in favor of Hezekiah of which they are not the only indications.

It was a long time, about eight centuries, after the building of the Second Wall, before a Third was needed; but finally, "as the city became more prosperous, it gradually outgrew its old walls," and Agrippa I. undertook

²⁶ See Is. 7:3; also 36:2.

²⁷ For a more extended discussion of this point, see *Journal of Biblical Literature*, 1903, 136 f.

to enclose the new northern suburb with a wall; which, however, was not finished until the great revolt in which the Jews as a nation perished, and then was completed on a much more modest scale than the king had intended.²⁸

The area of fortified Jerusalem has sometimes since been less, but never greater, than it was under Agrippa I. When it was restored, under the name Aelia Capitolina, by Hadrian, its defenses were simplified and contracted, the First and Second north walls being eliminated and the south wall carried across the top of the western ridge, as it is to-day.²⁹

Bliss seems to have shown that this was its course for at least two centuries, that is, until 333 A. D.,³⁰ but that before the end of another century the whole of the top of the southern end of this ridge had been enclosed, and within a few years (449-460) a new south wall, following practically the old lines and including the Pool of Siloam, was built by the Empress Eudocia, who thus restored the city to its largest dimensions.³¹

The next change is supposed to have been made just before the taking of the city by the Crusaders, when the line of defense chosen by Hadrian was again adopted;³² but according to Bliss the top of the southern end of the western ridge was again taken inside the city, probably toward the middle of the thirteenth century, as represented on a map published in 1321. Finally, however, for the third time, the short line was adopted, and this is the course the wall has taken from the fifteenth century to the present day.³³ The last restoration of the wall as a whole, according to the inscriptions at various points commemorating it, was undertaken in 1536 and finished in 1539.³⁴

²⁸ Josephus, *Wars*. v. 4, 2; vi. 6, 2.

²⁹ Bliss, *Excavations*, 305 f.

³⁰ *Excavations*, 306.

³¹ *Excavations*, 307 f.

³² *Excavations*, 310 f.

³³ *Excavations*, 311 f.

³⁴ Tobler, *Topographie*, 77 ff. The date given by Robinson (*Researches*), which has been copied by Richter and others, is 1542; according to Tobler, it is based on a mistaken reading, 948 for 945 A. H., in the inscription over the Jaffa Gate. Tobler himself claims to have had all the inscriptions translated for him by the official interpreter of the Prussian consul of his time. The date given in one of them, of which he quotes the translation, is that on which the repairs were "commanded and ordained," and this is probably true of the others. The result in detail is as follows.

Over the Damascus Gate	the date is June,	944 A. H.
Third Tower west of NE. corner	" "	" "
At the Northeast Corner	" "	945 "
At Stephen's Gate	" "	" "
Over the Jaffa Gate	" October,	" "
Between the Dung Gate and David's	" "	947 "
Over David's Gate	" July,	" "

This historical résumé has in it suggestions for the student of the modern wall. Naturally, while the city was growing along the lines of approach, the additions to its defenses, like the original wall, would be built of newly quarried, and newly finished, stone; for example, the so-called Second and Third walls.³⁵ On the other hand, when the city was shrinking to smaller dimensions and a line of defense was to be shortened, the material for the new wall would be sought in the abandoned outer one. These stones may or may not now be recognizable; for, if they were originally large, they may have been broken up for more convenient transportation, or they may, as wholes or in parts, have been refinished.

Similar problems have been produced by the alternate wreckage and reparation to which the whole or parts of the wall have been subjected. The simplest case would be one like that when Uzziah rebuilt, and that probably almost immediately, those four hundred cubits at the northwest corner which Jehoash of Israel had thrown down. See 2 Kgs. 14:12. Had the breach been neglected for any length of time, the restorer might not have found the materials needed so ready to his hand, but have been obliged to provide new stone for the purpose, as no doubt others under different circumstances had to do; not always, however, for when Nehemiah undertook to restore the entire wall, it had lain in ruins nearly a century and a half, yet few of the stones overturned were missing, otherwise he could not have finished the work in the astonishingly brief space of fifty-two days. See Neh. 6:15. Naturally, restoration of this sort leaves few traces, except perhaps in an increased number of small stones, some of them, as above suggested, from larger ones broken into pieces. Compare the south wall as restored by Eudocia, with its new stones and new styles of finish.³⁶

These suggestions might be multiplied; but enough has been said on the subject for the present purpose, and we will now proceed to a closer inspection of the wall as it was when my photographs were taken.³⁷

4. *The Masonry of the Wall.*

One cannot give the wall very close attention without being struck by the variety in its masonry. Merrill³⁸ describes nineteen kinds distinguished by differences in size, shape, or finish, or all of these features; and his list is not exhaustive. In fact, about all the possible varieties, within certain limits, are represented, some by comparatively few, but many by any number of examples.

³⁵ On the Third, see Josephus, *Wars*, v. 4, 2.

³⁶ Bliss, *Excavations*, 24 ff.

³⁷ Note that the pictures are all numbered and that the part of the wall, or other related subject in the vicinity of Jerusalem, in each case is marked on the accompanying map by a corresponding number.

³⁸ *Ancient Jerusalem*, 384 ff.

In the first place, although the wall is, for the most part, built of stones with some kind and degree of dressing, there are many on which no traces of a finishing tool are discernible. Stones of this general class are of several varieties, according to their size and the prominence of their unwrought fronts. The most noticeable, of course, are the larger ones, whose rough and bulging outlines project more or less prominently beyond the line of the wall. The largest occur at the corners in the courses next to the ground. See Pls. 10, 11. There are doubtless many of the same kind below the surface which have never been uncovered. They are often mixed with large drafted stones having rough and prominent bosses, especially in both directions from the northwest and southeast corners of the city. There are also some to be seen elsewhere. Sometimes they are roughly squared, but quite as often they seem not to have been in any degree fitted for any particular place in the structure. Stones of this kind, but smaller, are found higher up in the wall, but seldom in the two or more courses of the battlements. They are frequent with the ashlar of one sort or another, especially in the north and east walls. See Pls. 37 to 41. The distinction between large and small is here made for convenience only. It is not in itself one to which it is safe to give any great degree of importance, since it can be shown that some of the smaller stones are fragments of larger ones which were broken up to make it easier to handle them.

The unwrought stones in the wall are not all equally protuberant. There are many with faces comparatively flat, as if produced by splitting along the natural lines of cleavage characteristic of limestone. Indeed, this is in some cases the explanation of their flatness, or, to put it differently, they present flat faces because they are laid, not on the natural bed, but on one at right angles to it. They are generally small and not far from square in their superficial dimensions. The best specimens are found in the southern part of the west wall, where there are many mixed with drafted stones with unfinished or rather roughly finished centres. For largish specimens, see Pl. 48; for smaller ones, Pls. 4, 5, 8, etc.

The amount of unfinished work in the wall is no doubt considerable, but its amount may easily be exaggerated, because the tooling on many of the dressed stones, always unobtrusive, has by time and the elements been almost obliterated. The fact is, that when one undertakes a careful examination one is liable to change one's mind and become impressed with the amount and variety of the toolwork represented.

The wrought masonry will require more extended description. But before entering upon this subject something should be said about the tools

used by the Hebrews, that the terms employed may be understood and the distinctions made be appreciated.

It is taken for granted by those who have dealt with this subject that the tools of the stonecutters of Palestine in the past were practically the same that are now used in that country.³⁹ The most important are:

1. A heavy *hammer* for rough work, used also in the quarry.
2. A *point* or *chisel-pick*, a pointed tool in various sizes, driven with a curved hammer having oblique faces, and used in taking down the surface of a stone or giving it a grooved or pock-marked dressing.
3. A *pick*, a heavy tool, pointed at both ends, with a handle inserted in the middle. It produces a dressing similar to that of no. 2, but "shallower and more delicate."
4. A *bush-hammer*, whose two faces are furnished with teeth, those of one end being coarser than those of the other; a multiple point or pick.
5. A *plain chisel* in various widths.
6. A *toothed chisel* with teeth of various sizes, used in taking down rough surfaces.
7. A *comb-pick*, a kind of adze, with two edges each of which consists of a row of five or more teeth to the inch. This also has a handle like the pick, and like the latter is used for a final dressing.⁴⁰

The stones which cutters of various periods, by the use of the tools above described, wrought for the wall may be divided into three classes:

The first of the three includes stones of but one description, which, since they show no actual toolmarks, one would incline to refer to the unwrought class. On nearer inspection, however, they exhibit a regularity beyond that of being simply squared. In the first place, although they are mostly comparatively small, they all project to some extent, but the amount of their projection is noticeably moderate, and the bosses thus formed present a regularity of outline which can hardly be natural. In short, they are quarry-faced stones from which ugly angles and protuberances have been removed. They sometimes occur singly, but they are usually found mixed with more finished ashlar of about the same dimensions, especially at various points in the north wall and the northern part of the east wall. See Pls. 2, 38, 39, 40, 41.

The second of the three classes above mentioned consists of drafted stones. By drafted stones are meant those, large or small, whatever their

³⁹ So, for example, Dickie, in his paper on *Stone Dressing Past and Present in Jerusalem*, in the *Quarterly Statement* for January, 1897; quoted by Bliss, *Excavations*, 271 ff.

⁴⁰ For the native names of most of these tools and other details concerning stonecutting in Palestine, see Grant's *Peasantry of Palestine*, 152 f. For the shapes of nos. 2, 3 and 7 see Bliss, *Excavations*, 272. A bush-hammer is pictured on the ground in Pl. 71.

other marks, which have a margin, broad or narrow, deep or shallow, worked by one of the tools used for that purpose. They are of three general kinds distinguished by the toolmarks on their margins.

The rudest style of finish for the draft or margin is that produced by the chisel-pick.⁴¹ It is found on stones large or small, with centres rough or dressed in a variety of ways. There is, first, the large block with a rough boss. Dickie⁴² reports this combination rare in the ruins of the old south wall found, in fact, but once *in situ* (Pl. 61); but he remarks incidentally that "the boss and margin stones in the lower courses of the wall projecting from the Haram area are similarly dressed although of much larger proportions, and some of the stones built into the present south wall of the city are of this class." He might also have cited the great stones in the course next to the ground on the east side of the Haram, just south of the tower at the northeast corner, and the lowest three just south of the Golden Gate, which are noticeable for their massive roughness.⁴³ See Pls. 29, 33. They are not common elsewhere, but there are some in the south wall, especially east of the Dung Gate (Pl. 37). A very good specimen may be seen just inside the Damascus Gate, east side, where, of course, it is not *in situ*. See Pl. 54; for smaller ones, 10, 37. Dickie notes that all those which he had seen were of *mizzi*, and suggests that the hardness of this variety of limestone may explain the choice of the tool used.

There are also stones with picked margins whose bosses are dressed with the same tool; but not always in the same way, for the chisel-pick leaves a pockmark or a furrow, according to the angle at which it is held. For specimens, see Pls. 10, 37, and note that they are found with stones of about the same size having rough bosses.^{43a}

The stones with picked margins thus far described have more or less prominent bosses. There are others the centres of which are so low that they can hardly be termed bosses. In some cases these centres are unwrought (Pl. 5), in others picked, like the margins. See Pl. 10.

A second style of margin represented in the wall is that produced by the

⁴¹ This is the name for the *point* used by the English excavators and therefore preferred for this paper.

⁴² Bliss, *Excavations*, 279.

⁴³ It should be noted that these last are not *in situ*, for (1) they differ in important particulars, style of draft and height of boss, from the rest of the rough and heavy masonry of the east wall of the Haram; and (2) none of the rest of the masonry of this kind is, or was, intended to show above ground. See *Recovery of Jerusalem*, 324. On the other hand, they answer so well to Warren's description of the stones in the wall of which he found remains forty-six feet east of the Golden Gate that he was struck by the resemblance. See *Recovery of Jerusalem*, 158. It is therefore a reasonable conjecture that they came from that source.

^{43a} Dickie mentions that in the walls of the castle at Bāniās there are stones with picked margins whose bosses "show rough toolmarks." Bliss; *Excavations*, 276.

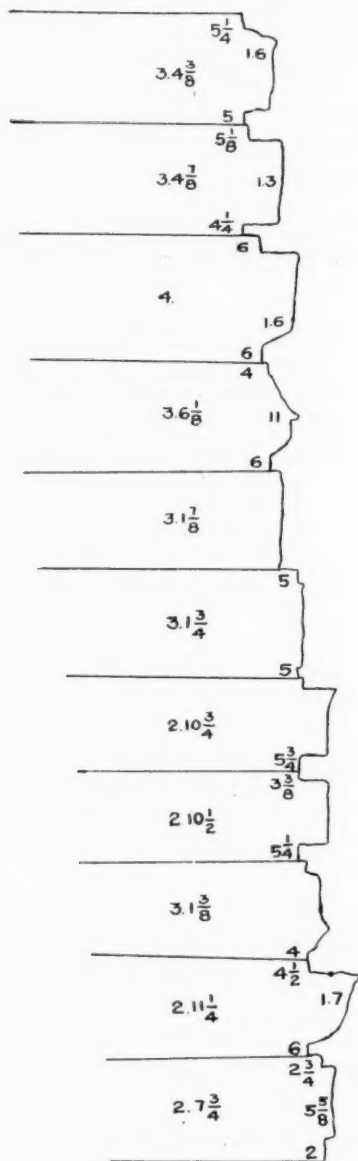
comb-pick or the toothed chisel, which is found in a larger variety of combinations than the picked draft. First, it is seen on some of the largest stones framing rough bosses, in the course, or courses, next to the ground, notably in both directions from the northwest and southwest corners of the city. See Pl. 47; also the ruins of Goliath's Castle, Pl. 55.⁴⁴ The number in sight, however, is small compared with the multitude discovered by excavators, especially Sir Charles Warren, to whom we are indebted for much of our knowledge of underground Jerusalem. His descriptions of the drafted stones which he found at the foundation of the Haram wall, from Barclay's Gate on the west to the Double Gate on the south, and, in the east wall from a point 105½ feet north of the southeast angle to the northeast corner, and 75 feet beyond, are, it is true, sometimes rather vague, yet it seems safe to suppose that he refers to the kind now under discussion. Thus, of those about the southwest angle he says, that they are "most beautifully" drafted; and again, that "their joints and marginal drafts are quite as perfectly wrought as those to be found on the stones whose faces are finely worked";⁴⁵ that is, as he expressly says of those at the Wailing Place, "with an eight-toothed chisel."

These large stones are not all equally large, nor are their recognized characteristics invariable. They vary considerably in length, but not so much in thickness. Warren found the average thickness of those in the south wall of the Haram, 213 feet from the southwest angle, 3 feet 8+ inches, but of those at the northeast corner 3 feet 4+ inches. There is a difference, too, in the margins as between different stones and different sides of the same stone. Thus, at the southwest corner the width is from 4 to 6 inches, but at the northeast it is sometimes 7¼. Finally, the bosses vary even more decidedly; for, while at the southwest corner the greatest thickness is 18 inches, at the northeast it is 26½; and the difference in outline almost justifies Warren's dicta, that the rough stones at the southwest corner "differ entirely from any in the east wall," and that those at the northeast angle present "a very curious appearance."⁴⁶

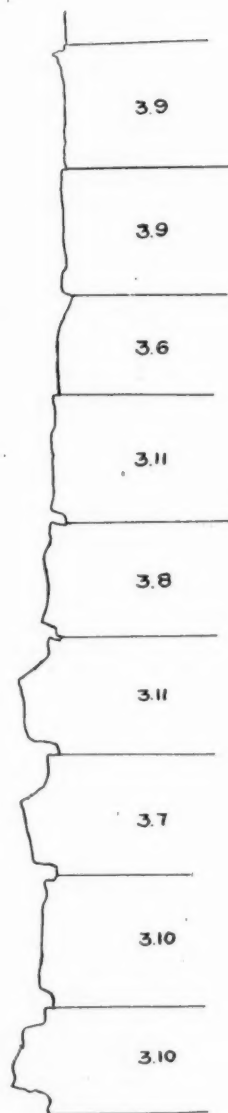
"Merrill (402) claims that "no people ever succeeded in imitating" what he incorrectly calls "the Jewish bevel"; but Dickie (Bliss; *Excavations*, 276) says it is found "in the wall abutting on Hadrian's Arch at Athens," and Conder (*City of Jerusalem*, 91) declares that such masonry was not known in Palestine, or even Phoenicia, before the Greek Period.

⁴⁴ *Recovery of Jerusalem*, 125.

⁴⁶ The figures for the southwest corner, which are taken from *Recovery of Jerusalem*, 127, are not exact; for those for the northeast corner, see the Plates accompanying the Jerusalem volume of the *Survey of Western Palestine*. Comp. *Recovery of Jerusalem*, 167, 324. On p. 127 of the latter work the statement is made, that the rough stones near the southwest corner "appear as when they were brought from the quarries, roughly dressed in three faces." The last clause is of doubtful meaning. If interpreted by



Profile of Stones at NE. Corner.



Profile of Stones at SW. Corner.

A word should be added by way of explanation of the striking prominence of the bosses in the masonry now being considered. It has been held that stones of this kind were a better defense against battering-rams than plain-faced ones, and that they were used in the wall of Jerusalem for that reason; but this theory will not do in the present case, for, to mention only two objections, (1) the roughest of this rough work is on the east side of the Haram, where, owing to the nature of the ground outside, an enemy would be least likely to attack the city and the use of battering-rams would be most difficult; and (2) the rough work at and about the southwest corner is all below a pavement marking the extent to which the adjacent ground had been, or was to be, raised when this part of the wall was erected.⁴⁷ From these two facts it seems safe to infer that, in the parts of the wall to which they apply, the masonry was left in some respects unfinished because its rudeness was to be hidden underground. Beds and joints, however, especially about the southwest angle of the Haram, were not slighted. Two or three further facts render it doubtful if the largish stones with less prominent bosses which are found above ground in various parts of the wall were always, if ever, regarded as particularly strong defensive features: (1) There are long stretches of the wall in which there are none of these stones; (2) in places where they are found they are not so used as to offer the greatest resistance to battering-rams; and (3) there is a tower at the eastern end of the old south wall in which "chisel-picked stones and rough bossed stones" are "placed indiscriminately,"⁴⁸ apparently for the sake of variety.

The drafted masonry thus far considered has been of the heavier character. There are many comparatively small stones with rough bosses, and some of them, although it does not happen to show in the photographs taken, must have comb-picked margins. A few with margins of this kind have bosses roughly trimmed with the chisel-pick. See Pls. 12, 37; also 23, showing pillars in "Solomon's Stables," built of stones which perhaps originally had their places in the wall; also 59, showing a pile of stones found during the excavations for the foundations of the English School, and 63 showing the ruins of a building at Kaloniyeh, the corners of which were built of cut stone. In Pl. 10 is seen one which was first, or partly, drafted with a comb-pick, but finally finished with a plain chisel.

p. 122, where the same kind of stones are described as having "rough-picked faces," it would seem to be at variance with the clause preceding; also, and more clearly, with the profile of the stones first described, 90 feet from the southwest angle, in the Plates illustrating the Jerusalem volume. This profile is here reproduced with one showing the shapes found in the tower at the northeast corner, that the reader may judge whether the stones of the former look as if they had "picked faces," and how much they differ from those of the latter.

⁴⁷ *Recovery of Jerusalem*, 122.

⁴⁸ Bliss, *Excavations*, 94 f.

The bosses on the varieties of drafted stones with a combed finish thus far considered are of various heights, but this difference does not seem to warrant further division. There are, however, stones of which the centres, though rough, are not high enough to be called bosses. These may properly be regarded as a separate variety. They are generally, as in the southern part of the west wall, found with others of about the same size, but with picked centres. See Pl. 6.

The latter style of masonry was a favorite with the Hebrews. At any rate, Bliss found it in the oldest sections of the old south wall in his excavations. The specimens there uncovered he describes as follows: "Here we have the most beautifully set work we have observed anywhere in our excavations. The fine rubbed jointing is superior to any ever found in Jerusalem, and is so close that a pin-point can hardly be inserted. The stones are perfectly squared and set without mortar. A few have centres projecting not more than $\frac{1}{4}$ inch. The broad margins, which are worked fine and smooth, are carefully comb-picked, while the centres are pick-dressed."⁴⁹ Later⁵⁰ he quotes Dickie as referring this piece of masonry to the date of what are called in 1 Kgs. 7:9 "costly stones." For further specimens in the present wall, see Pls. 37, 54.

At the Damascus Gate, and now and then elsewhere, the picked centre is emphasized by a shallow groove separating it from the combed margin. See Pl. 45. This attempt to improve upon the original style cannot be pronounced a success, but for an example of utter lack of skill and taste, see Pl. 29.

The most interesting masonry with the combed margin remains to be examined. For a good specimen, see Pl. 25, below. It is in the south wall of the Haram near the eastern end. The draft is slightly sunken, and inside it, barely visible, is a border about two inches wide done with the same tool. Within this border the surface is finished with a shallow picking more "carefully and delicately executed" than is usual with this kind of dressing. The tool used is generally supposed to have been the point, that is, a single-pointed chisel, but a practical stonecutter to whom the photograph was shown at once declared that it must have been something like a bush-hammer, and since a tool of this kind (*shāhūṭeh*) is actually among those now used in Palestine (Pl. 71),⁵¹ there is something to be said for this opinion.

The masonry of the Haram at Hebron is of precisely the style represented by this stone. See the *Quarterly Statement* for 1882, p. 197, where the former is described as follows:

⁴⁹ *Excavations*, 30.

⁵⁰ *Excavations*, 277 f.

⁵¹ Grant, *Peasantry of Palestine*, 153.

"A draft 4 inches in width and $\frac{1}{2}$ inch deep, wrought with an adze or fine-toothed instrument.

An inner border 4 inches wide wrought with a similar tool.

A centre finished with a pointed instrument struck with a mallet.

An average height in the courses of 3 feet 7 inches.

An extreme length in the stones of 24 feet 8 inches."

Warren, who examined the southeast corner of the Haram to the foundation, reports⁵² that the wall is of one style to the bottom, a distance of 80 feet 5 inches, that, except in a few cases in the lowest courses, to which he calls attention, the stones "differ in no wise from the perfect specimens above ground."⁵³ Note the plural "specimens." It implies that the large and finely dressed stones above ground are all of a kind, that is, all have combed margins and picked centres. At first sight this seems to be true, at least of those in Pl. 25; but, when they are carefully examined, it appears that the one at the upper left-hand corner has not only combed margin but a centre dressed with the same tool or a toothed chisel. We have, then, here two varieties of stones with a combed margin, and, since Warren was evidently not looking for the difference that distinguishes them, it is probable that there are others of both kinds under ground—and, for that matter, above it—which escaped his attention.

The discovery just made suggests the advisability of applying the magnifying-glass to the photograph of the Wailing Place, where the masonry has always been regarded as of the same order as that of the southeast corner; also to that of the northeast corner, where, according to Warren, the style is the same, but "the chisel-work is not so well done."⁵⁴ The result in the former case is to find that the four stones shown in Pl. 15 have double margins, which appear to have originally been finished with the comb-pick, but to have been largely worked over with the plain chisel. Unfortunately the stones shown in Pl. 34 are so weathered that the toolmarks on their margins do not show in the photograph, and my notes are as silent as Warren on the subject.

Warren takes pains to note the difference between the rough stones at the southwest and those at the northeast corner of the Haram, but he mentions no peculiarity of those with finished centres at either point as compared with each other or with those at the southeast angle. Pl. 17 presents a group from the southwest corner, which may be compared with that of Pl. 25. It will be seen that they are not so large as those at the southeast corner, and

⁵² *Recovery of Jerusalem*, 135 ff.

⁵³ The exceptions mentioned are chiefly instances of irregularity in the margins, the range, toward the bottom, being from 0 to 16 inches, whereas elsewhere the average is between 3 and 4. See *Recovery of Jerusalem*, 138, 148.

⁵⁴ *Recovery of Jerusalem*, 167.

that the margins are slightly deeper; but that the inner border is not as thoroughly carried out. In the matter of tooling there is the same lack of uniformity as at the southeast angle; for, while all of these stones have picked centres, only one of them (left, below) has a combed margin and inner border, the others showing the marks of the plain chisel. Thus, the net result of an examination of the great dressed stones about the Haram, so far as they have combed margins, is that there are two varieties, one with a picked, the other with a combed centre.

In the course of the examination of these large dressed stones mention has twice been made of another type of drafted stones, namely, one in which the drafting tool is a plain chisel. There are no large stones of this type, with rough bosses, shown in the photographs of the present wall, but Bliss found them in the buttresses supporting the wall across the Tyropoeon at its mouth. See *Excavations*, 105, where, in describing one of these buttresses, he says: "The bases project from $1\frac{1}{2}$ to 6 inches, the margins are worked by chisel draft, but in a very few cases, on the stones last discovered, the comb-pick has been used." Here, also, according to Conder, belongs the masonry of Goliath's Castle, so called, where, however, the marks of a toothed chisel are distinctly traceable. See p. 30.

The small stones with plain drafts and rough bosses are very numerous. They are of two kinds. First, there are those with a noticeably narrow margin. Indeed, it is sometimes so narrow that it might be made the mark of a distinct variety, line-ashlar, between those on which no toolmarks appear and those which have an unquestionable margin. On the former, see p. 24 f. They all have quarry faces and are generally found in groups or courses, especially in the north wall and the northern end of both the east and the west wall. See Pls. 2, 3, 11, 22, 38, 39, 40, 41.

Quite distinct from this ashlar of the narrow draft is a variety which has wide and irregular margins and a correspondingly small and sometimes misshapen boss. It differs from the former also in that it includes stones of various shapes and sizes. For specimens see Pls. 2, 3, 18, also 64, a picture of the part of the walls of Mar Saba.

In a few instances the plain draft is found with a more or less irregular picked boss. For a strange assortment of stones of this kind, some of which seem to have been worked over, see the east side of the Tower of David, Pl. 52. One showing a margin partly recut has already been cited, see p. 34.

A very different grade of work is found on the west side of the citadel and at the top of a little tower on its south side, where portions of the wall consist of stones of varying length, having a narrow draft, apparently

finished with a plain chisel, on the lower side and one end, and a boss dressed with a fine point or a bush-hammer. See Pl. 3.

Here belong, also, the small stones with low, square bosses at the top of the wall back of the southwest corner of el-Aksa (Pl. 18), if, as seems to be the case, both have the finish of the plain chisel.

There remains to be noticed the most numerous variety of masonry drafted with the plain chisel, namely, that consisting of stones the centres of which are too low to be called bosses and are picked or furrowed with the chisel-pick. They are of various shapes and sizes, but they are nearly all comparatively small. On some of them the margin is of uniform width, and the centre correspondingly symmetrical; but in many cases the work is very carelessly done and the effect unsatisfactory. For specimens, see Pls. 8, 9, 22, 49.

The third and last general type of masonry to be discussed is that in which the whole face of the stone is on one level and is worked with the same tool in the same manner. Here, too, there is room for variety, and the various ways of finishing such stones are represented in the wall of Jerusalem.

The rudest form of dressing, if it be fair to call it a dressing, is seen in a very few stones with "the long irregular incisions at fairly regular intervals" which, according to Dickie,⁵⁵ are made by the quarry-pick. See Pl. 32.

Next come the stones, rather below the medium size, dressed with the chisel-pick. Dickie mentions them as found now and then among those with a combed dressing in the upper of the two walls unearthed by Bliss.⁵⁶ He also cites the upper courses at the Wailing Place as a part of the present wall where they are to be seen interspersed with combed specimens.⁵⁷ For others, see Pls. 6, 10, 23; also 37, 54.



Flat stones with a combed dressing, as above intimated, were more numerous in the old south wall than those with picked faces. This is also true of the present wall. Dickie mentions, besides the upper courses at the Wailing Place, the south wall of the Haram, "where the city wall projects from the mosque el-Aksa." See Pl. 13. He should have added the lower courses of large stones, in the same "south wall," from el-Aksa to the southwest corner. See Pl. 19. At first sight these large stones, like the smaller ones to which Dickie refers, look perfectly smooth, and many of them maintain this appearance, but if those toward the corner are carefully examined in the photograph with a glass, the marks of the comb-pick will


⁵⁵ Bliss, *Excavations*, 275.

⁵⁶ *Excavations*, 280.

⁵⁷ *Excavations*, 280 f.

become visible. The absence of such toolmarks on the rest is, of course, due to the action of the elements. These flat stones, it should be observed, though badly weathered, are not very ancient, having evidently been used to replace drafted stones like those shown in Pl. 17 when the wall was rebuilt after a pretty complete demolition. For two more flat ones, see Pl. 54.

Here belongs a kind of stones which, though not very numerous, have certain interesting peculiarities. They often occur singly, when they attract attention by their shape, thicker than it is wide, which gives one the impression that for some reason they were set on end. Their tooling, too, as one approaches, becomes noticeable. The marks are those of the *drove*, or *droving-iron*, a broad chisel worked with a wooden mallet, often, as in Pl. 48, applied in a diagonal direction, but sometimes perpendicularly. Sometimes, also, according to Dickie, "a toothed tool has been employed, which gives the furrowed effect with a combed detail."⁷⁵ On some of these stones there are interesting masons' marks: for example on one, with diagonal tooling,  on another with perpendicular toolmarks, 

and on a third, with a slightly raised center and diagonal tooling 

Fair specimens of the commoner sort are found in Pl. 48. See also Pls. 23, 58. In the latter the toolmarks are unusually faint, probably because the building of which the stones are a relic, a Crusading structure, was destroyed by fire.

Finally, there are the flat stones with perfectly smooth faces. They are of all sizes, and they are found in numbers in various parts of the wall. Wilson says of the section beginning about fifty feet south of the Golden Gate, "Southwards from the postern the stones all have plain chiseled faces." In my own notes I find the entry, "Beyond the first angle there is now and then a drafted stone with a picked centre, or a flat one with diagonal tooling; but most of the work has a plain finish. For a distance there are a few with rough faces mixed with projecting columns near the ground. Finally, there are only large plain stones at the bottom nearly as far as Mohammed's Pillar, just north of which there are three from 5 to 6 feet long and 3 feet thick." The plain finish is also found on and about some of the gates. See Pls. 22, 30, 36.

⁷⁵ Bliss, *Excavations*, 281.

THE MODERN WALL OF JERUSALEM

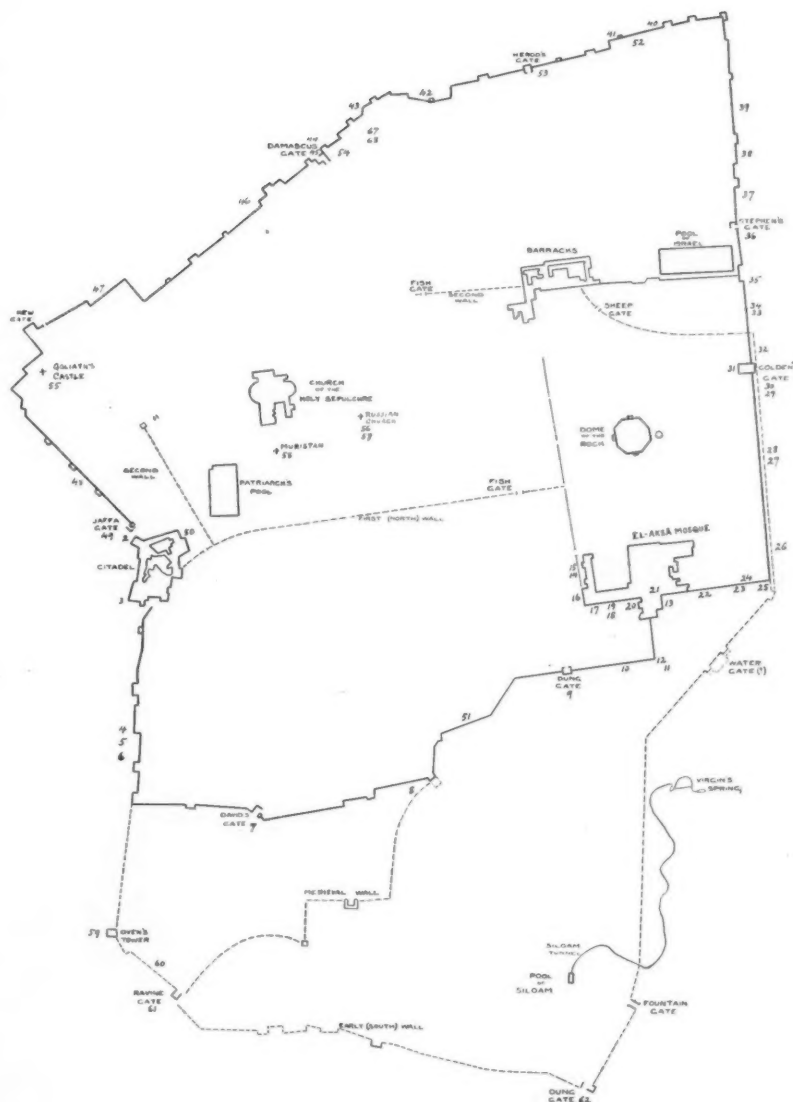


Plate 1. An Outline Map indicating the Courses taken by the Wall and the points pictured in the Plates.



THE MODERN WALL OF JERUSALEM

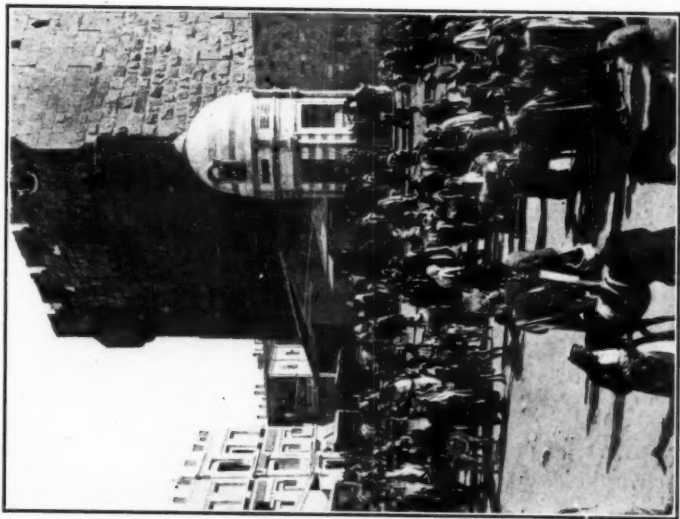


Plate 2. The Western Entrance; The Northwest Tower of the Citadel.

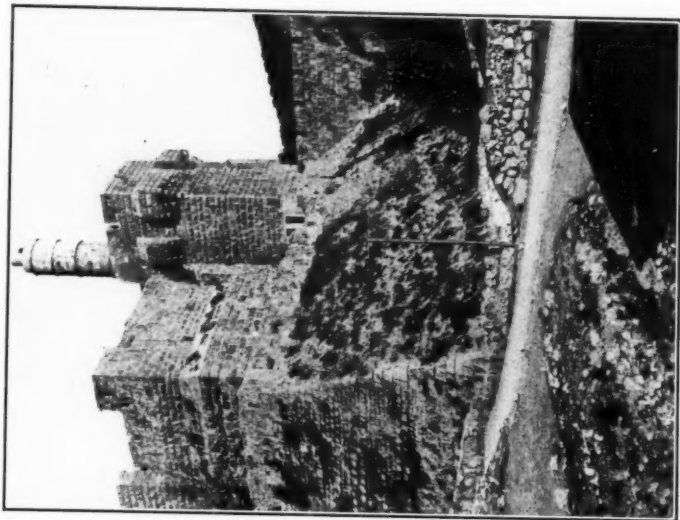


Plate 3. The Citadel from the Southwest.



THE MODERN WALL OF JERUSALEM



Plate 4. The West Wall South of the Citadel.

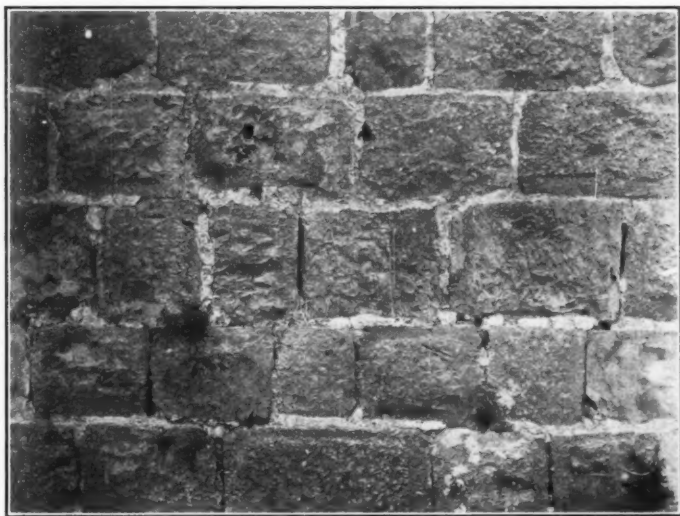


Plate 5. The West Wall South of the Citadel; Detail.



THE MODERN WALL OF JERUSALEM



Plate 6. The West Wall South of the Citadel; Detail.



Plate 7. David's Gate or The Zion Gate.

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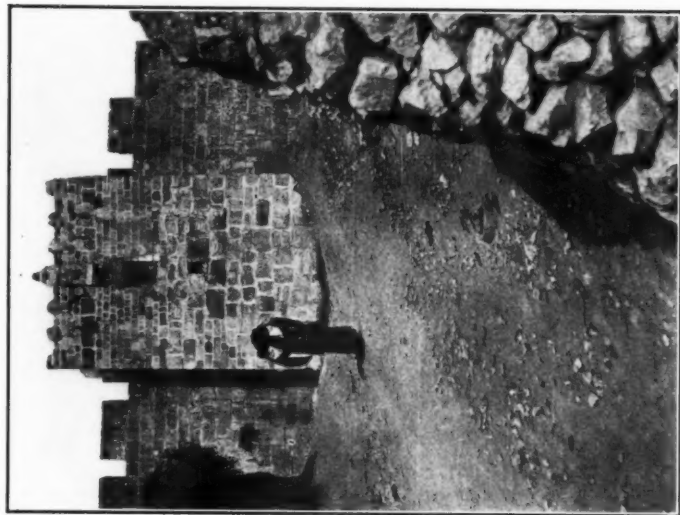


Plate 9. The Dung Gate.

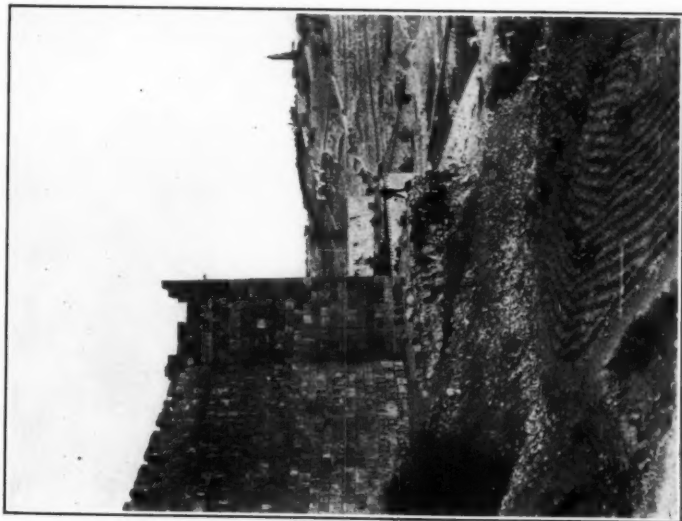
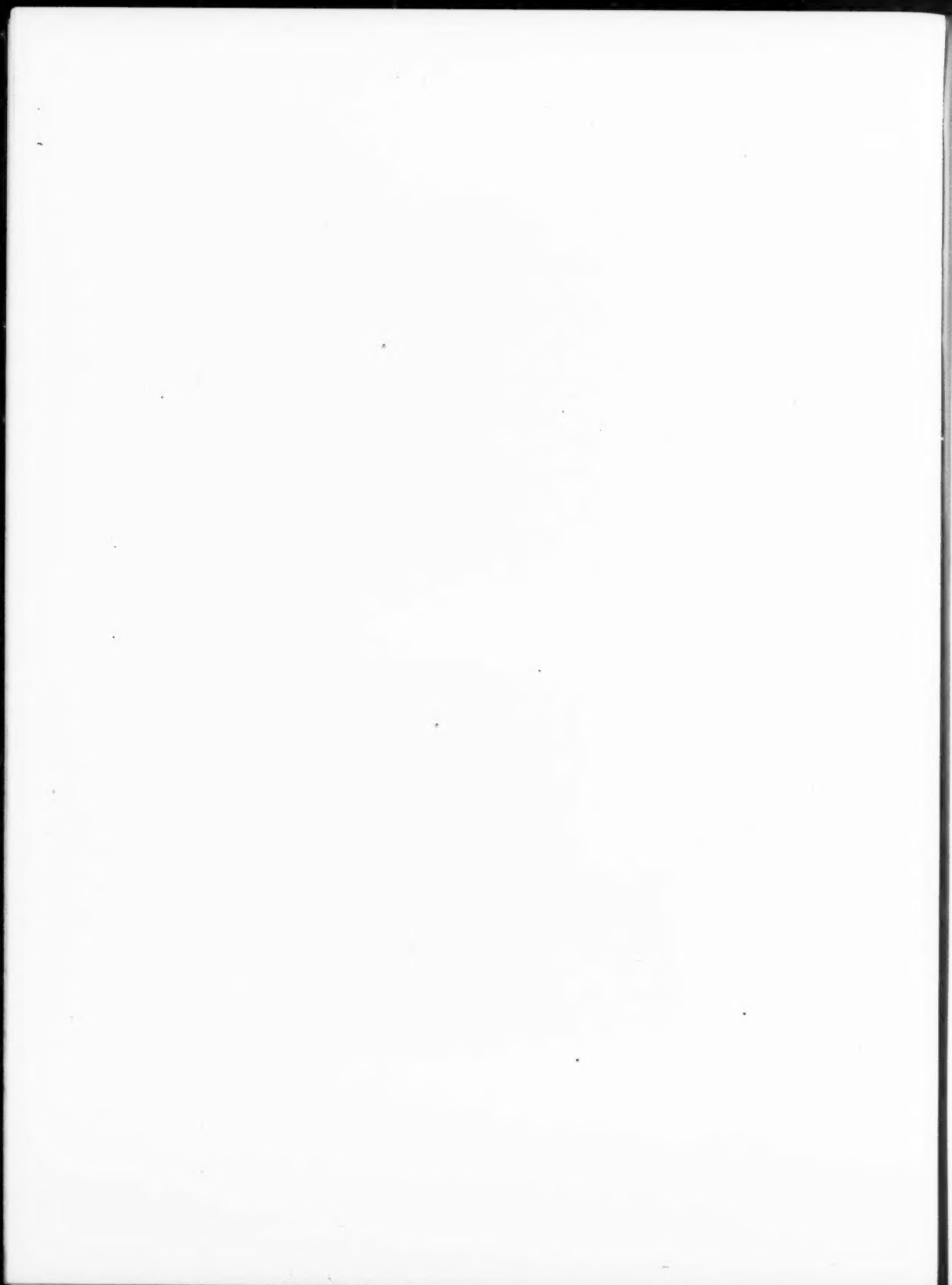


Plate 8. Burj Kibrīt. (Sulphur Tower.)



THE MODERN WALL OF JERUSALEM



Plate 14. The Jewish Wailing Place.

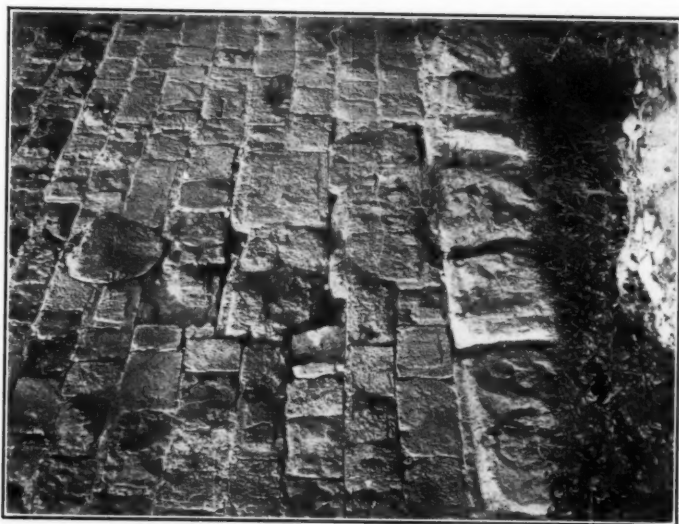


Plate 10. The South Wall, East of the Dung Gate.



THE MODERN WALL OF JERUSALEM

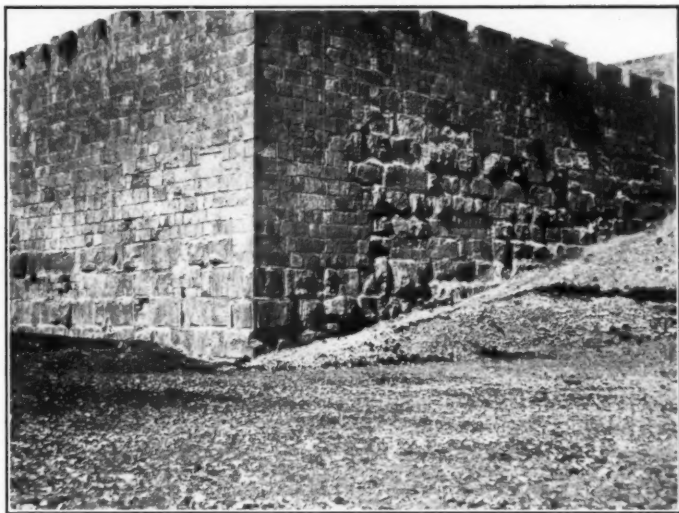
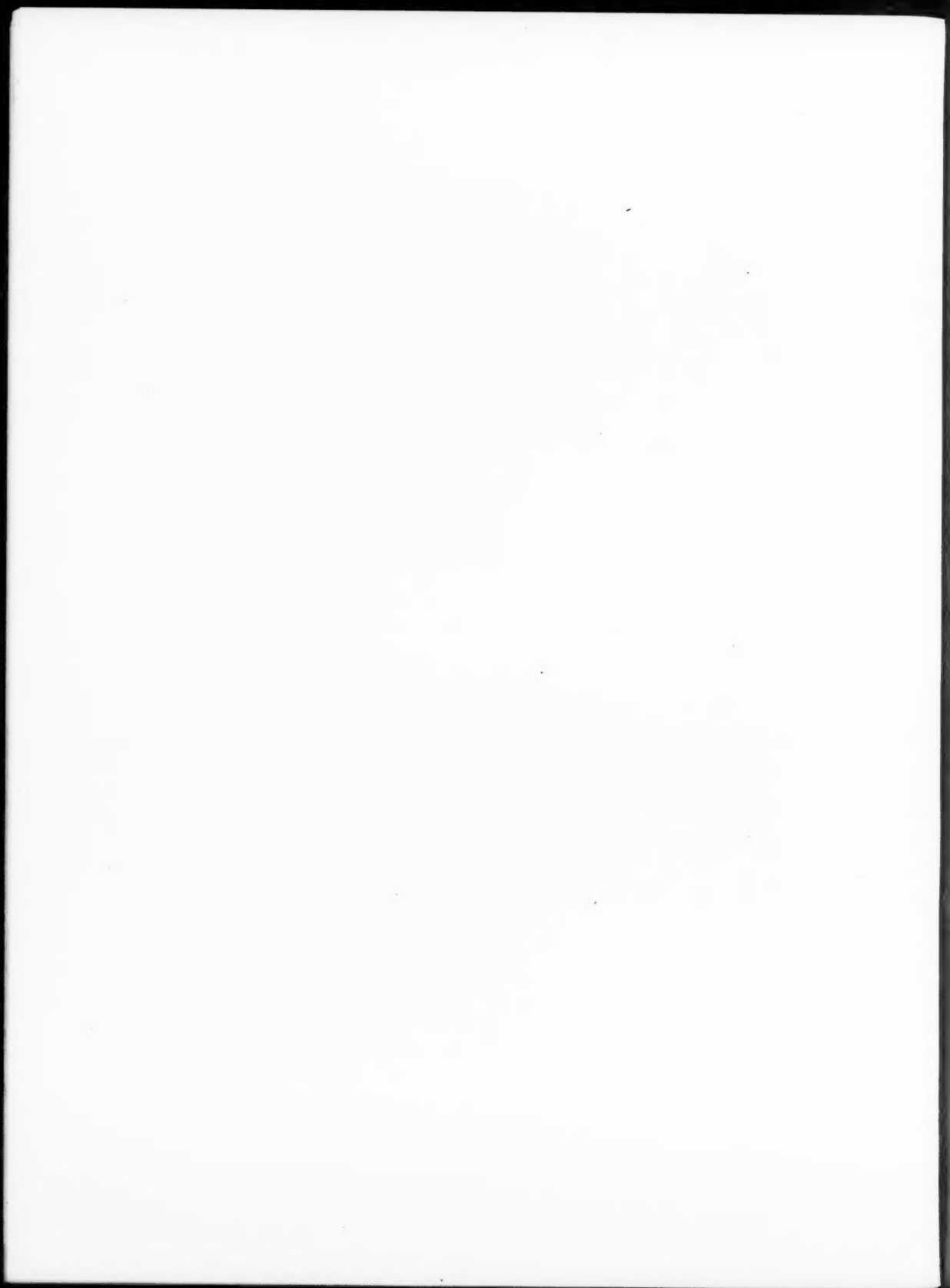


Plate 11. The Southeast Corner of the City.



Plate 12. The Southeast Corner of the City; Detail.



THE MODERN WALL OF JERUSALEM

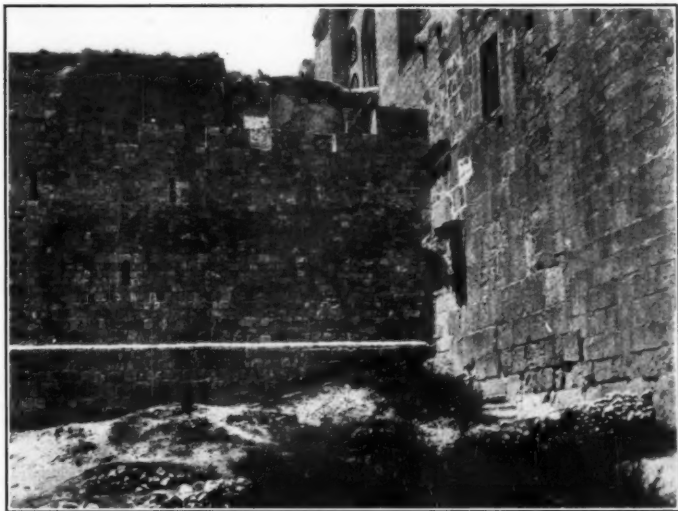


Plate 13. The Double Gate, in the Haram Wall where the City Wall abuts upon it.



Plate 22. The Triple Gate.



THE MODERN WALL OF JERUSALEM

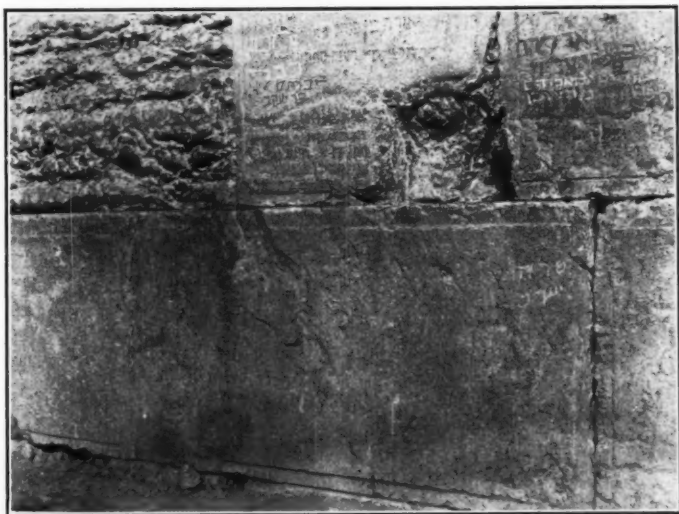


Plate 15. The Jewish Wailing Place; Detail.



Plate 16. Robinson's Arch.



THE MODERN WALL OF JERUSALEM

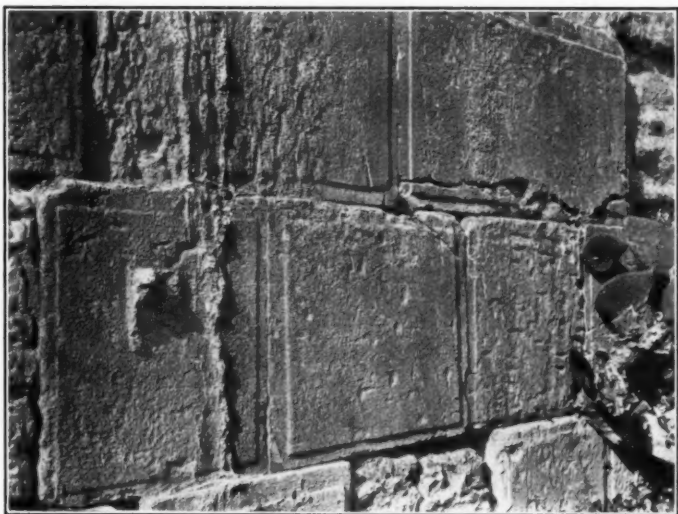


Plate 17. The South Wall of the Haram, near the Western End.

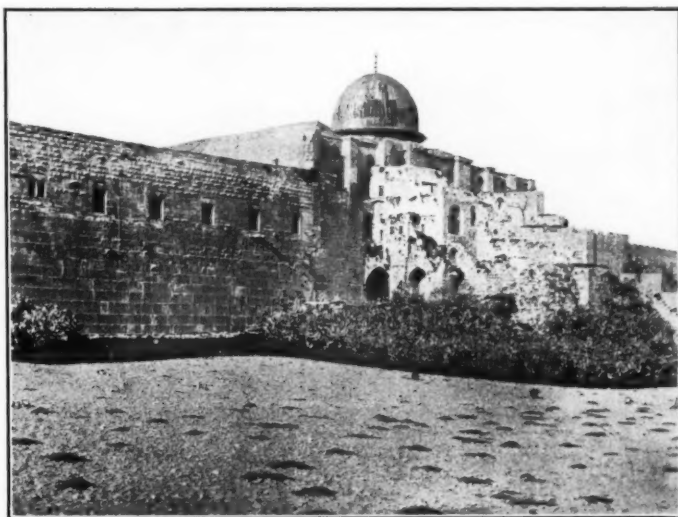
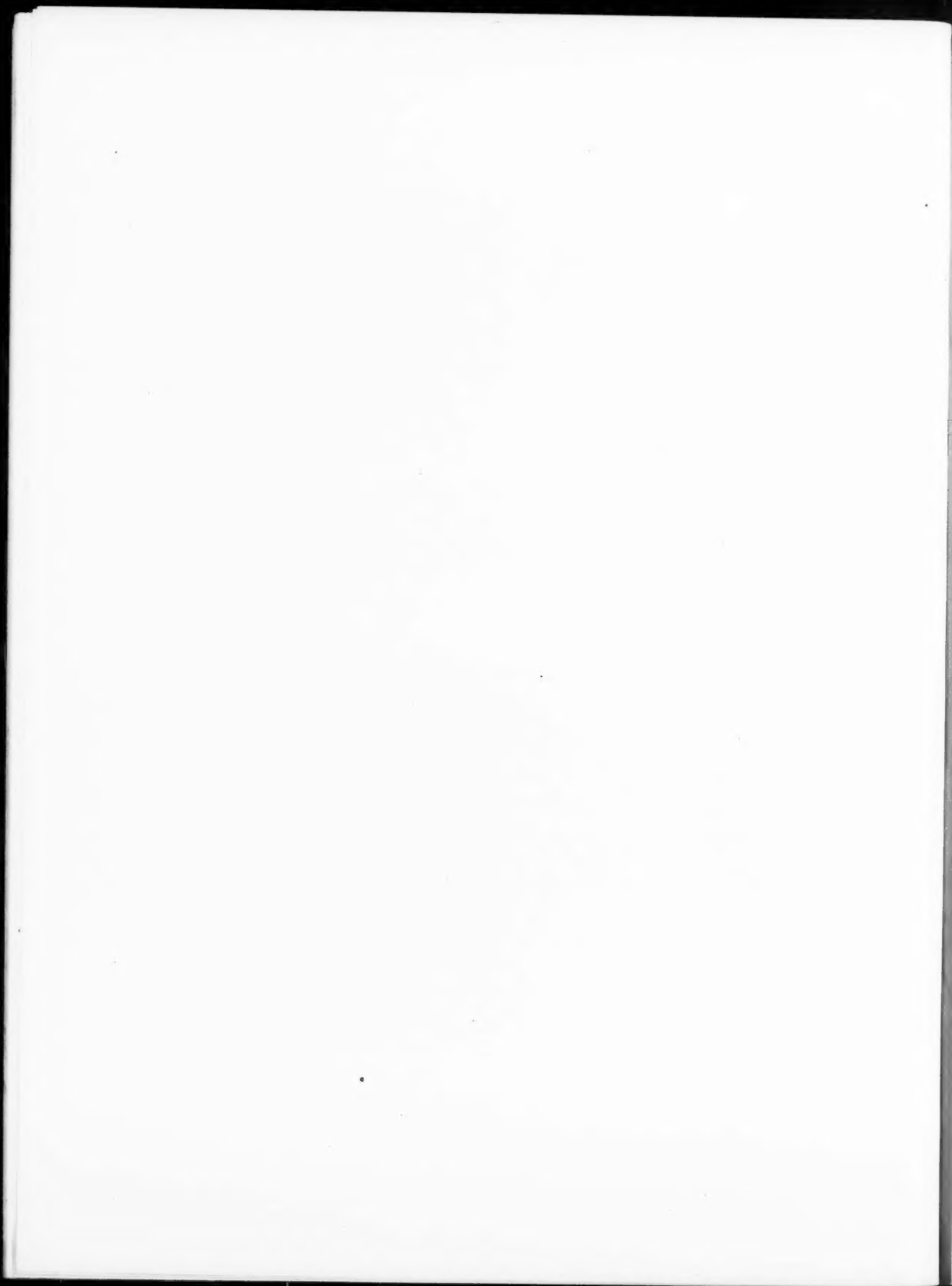


Plate 18. The South Wall of the Haram, West of el-Aksa.



THE MODERN WALL OF JERUSALEM

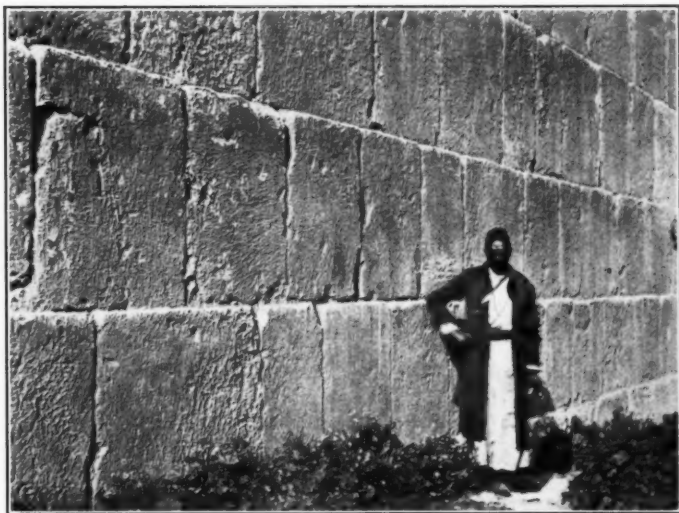


Plate 19. The South Wall of the Haram, West of el-Aksa; Detail.

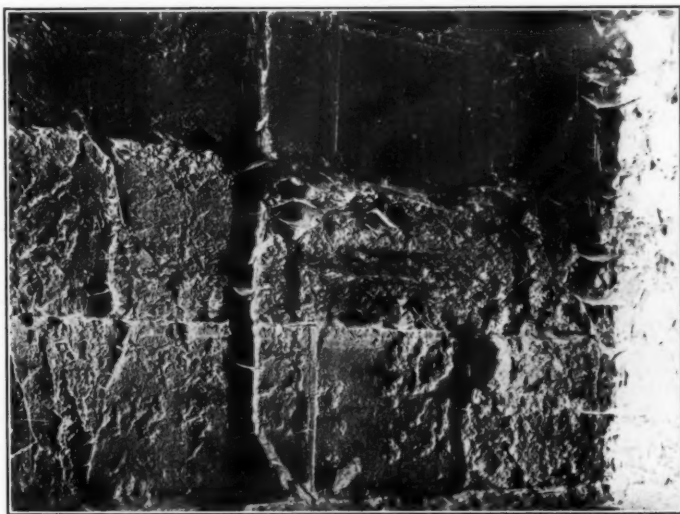
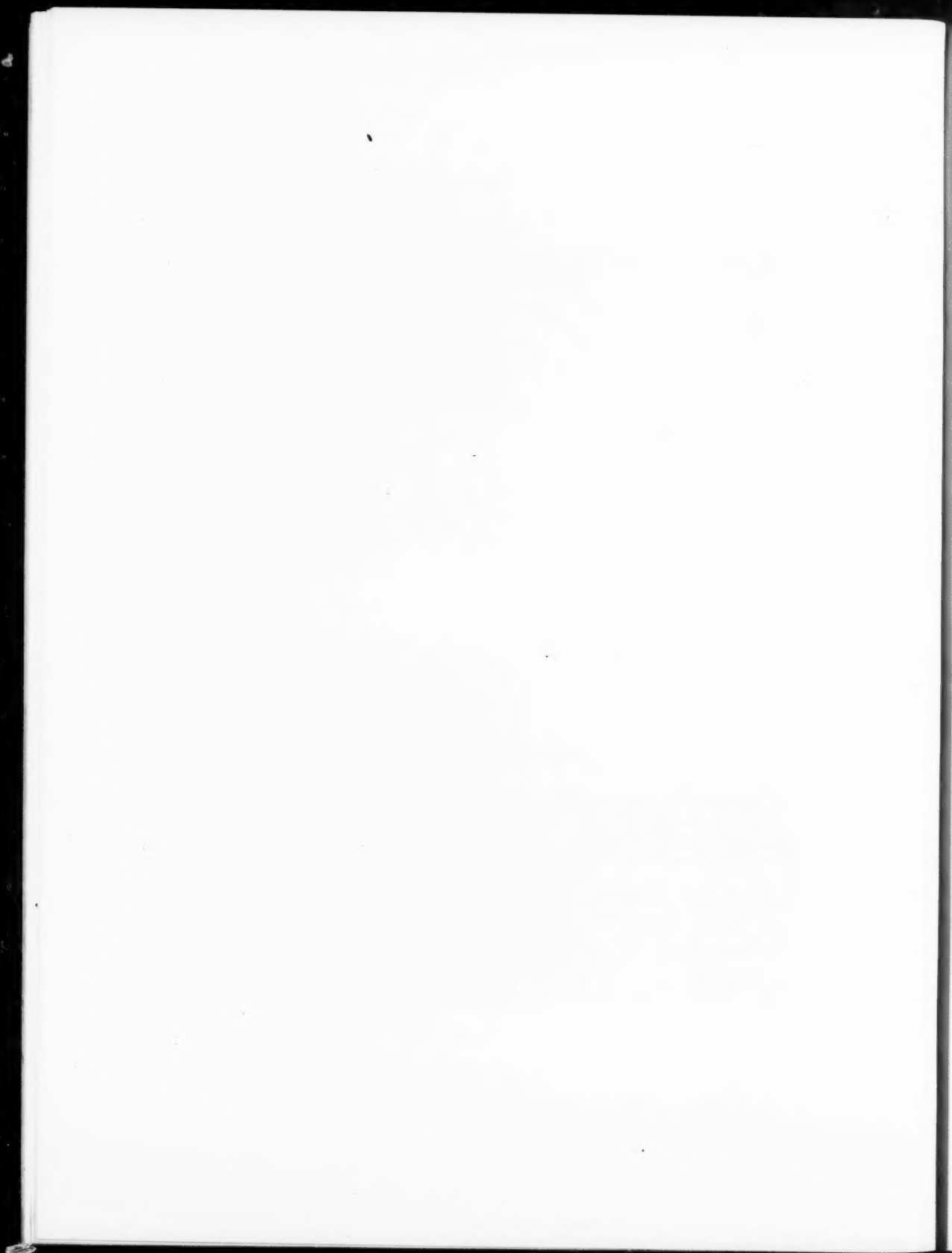


Plate 20. The South Wall of the Haram, West of the Double Gate.



THE MODERN WALL OF JERUSALEM

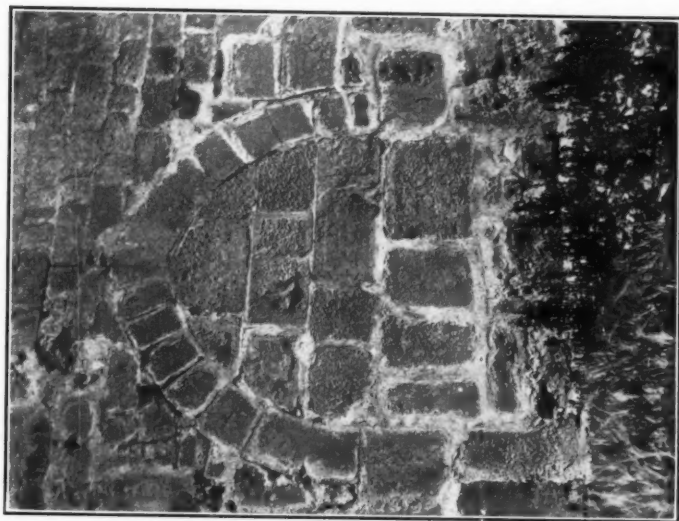


Plate 23. The Single Gate.

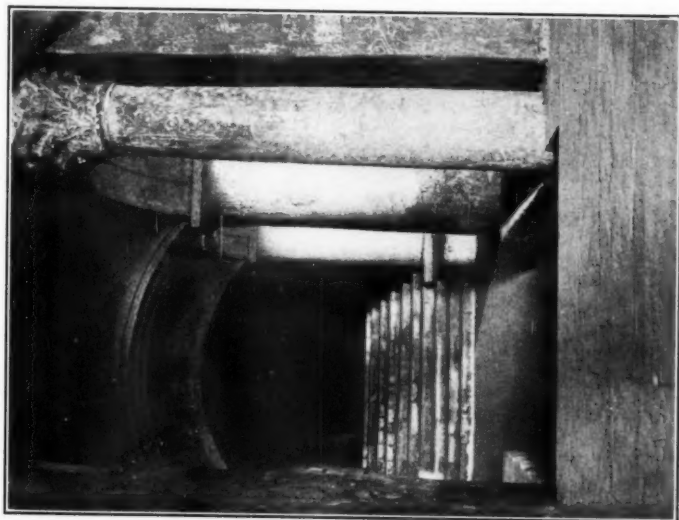


Plate 21. The Double Gate, Inside.



THE MODERN WALL OF JERUSALEM



Plate 27. The East Wall of the Haram, South of the Golden Gate.

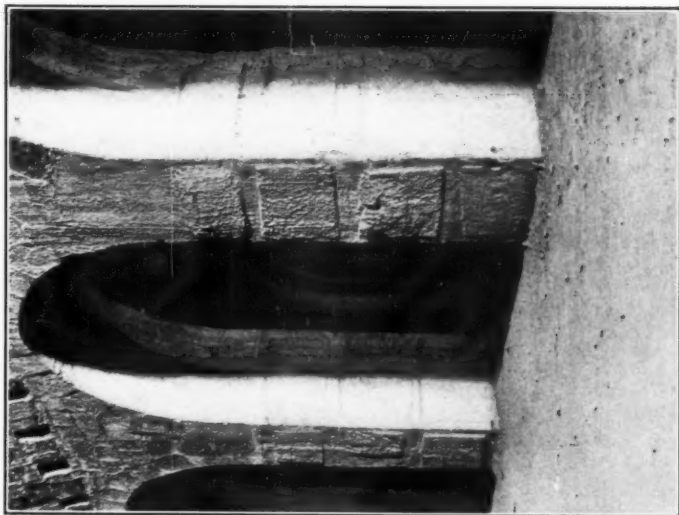


Plate 24. Solomon's Stables.



THE MODERN WALL OF JERUSALEM

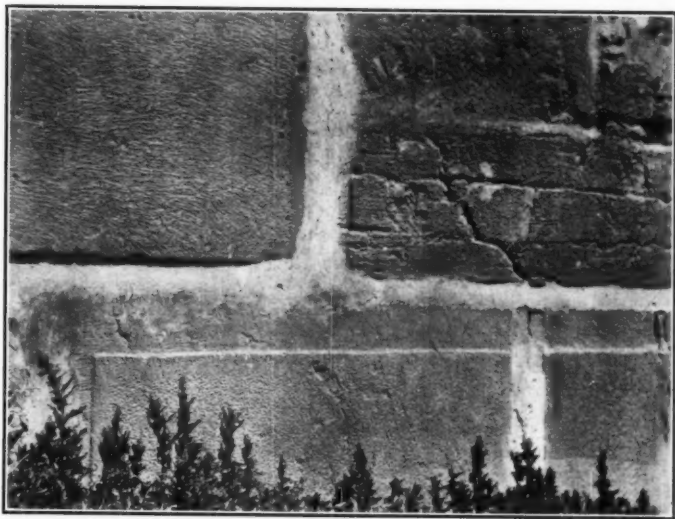


Plate 25. The South Wall of the Haram, near the Southeast Corner.

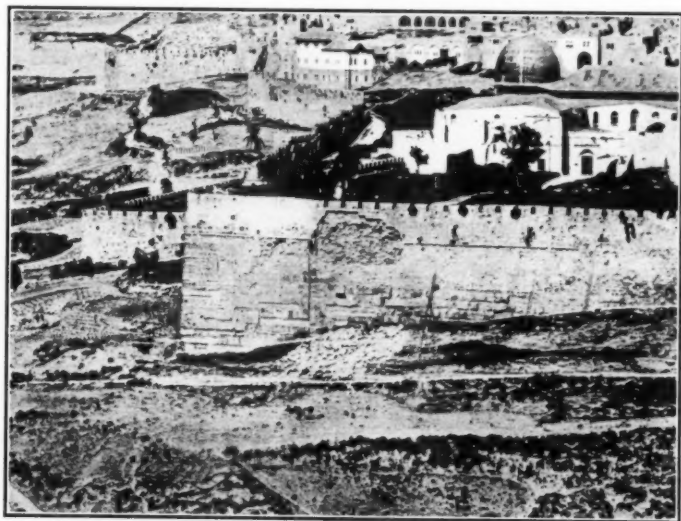
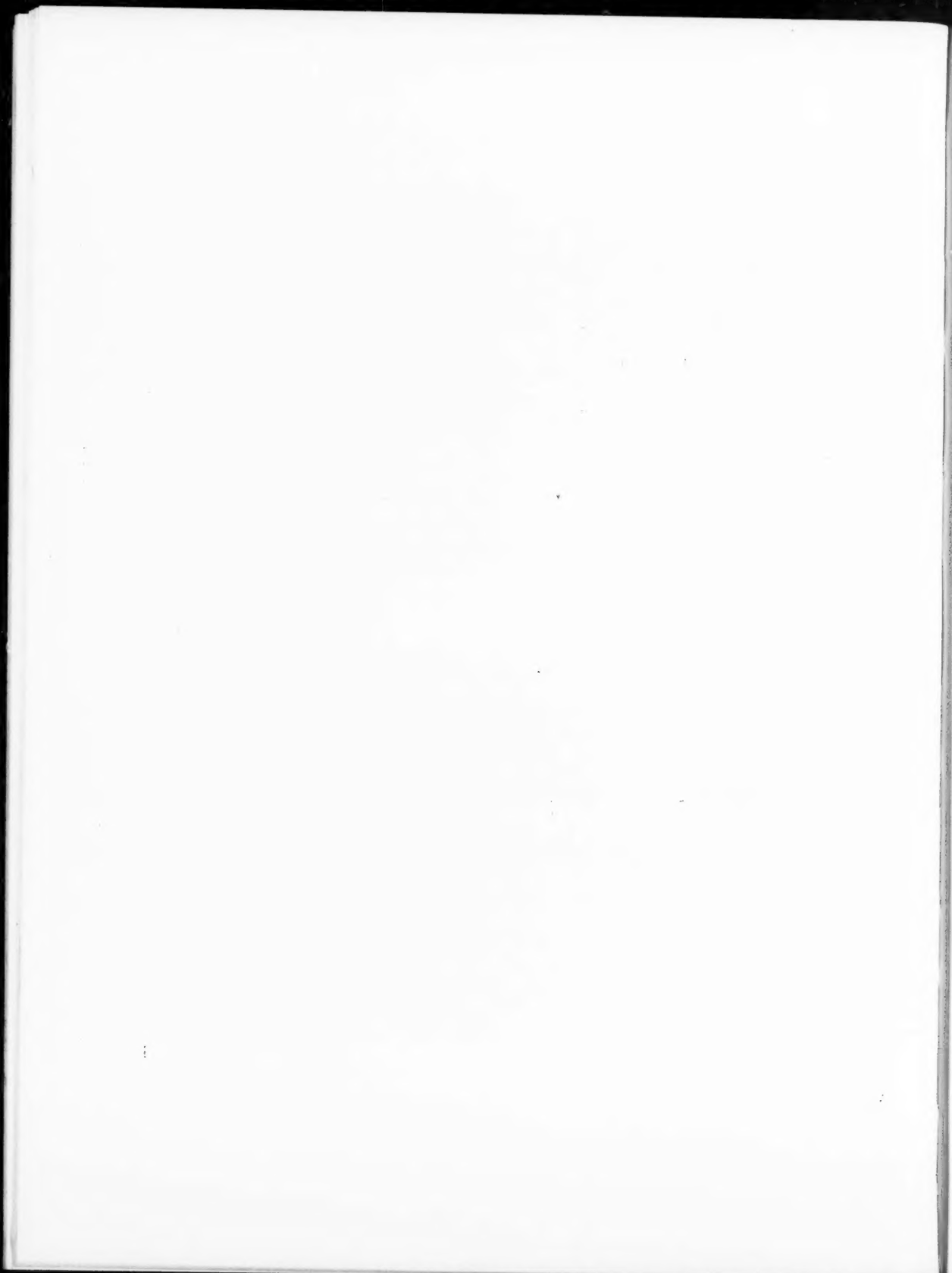


Plate 26. A Patch of Exposed Rubble.



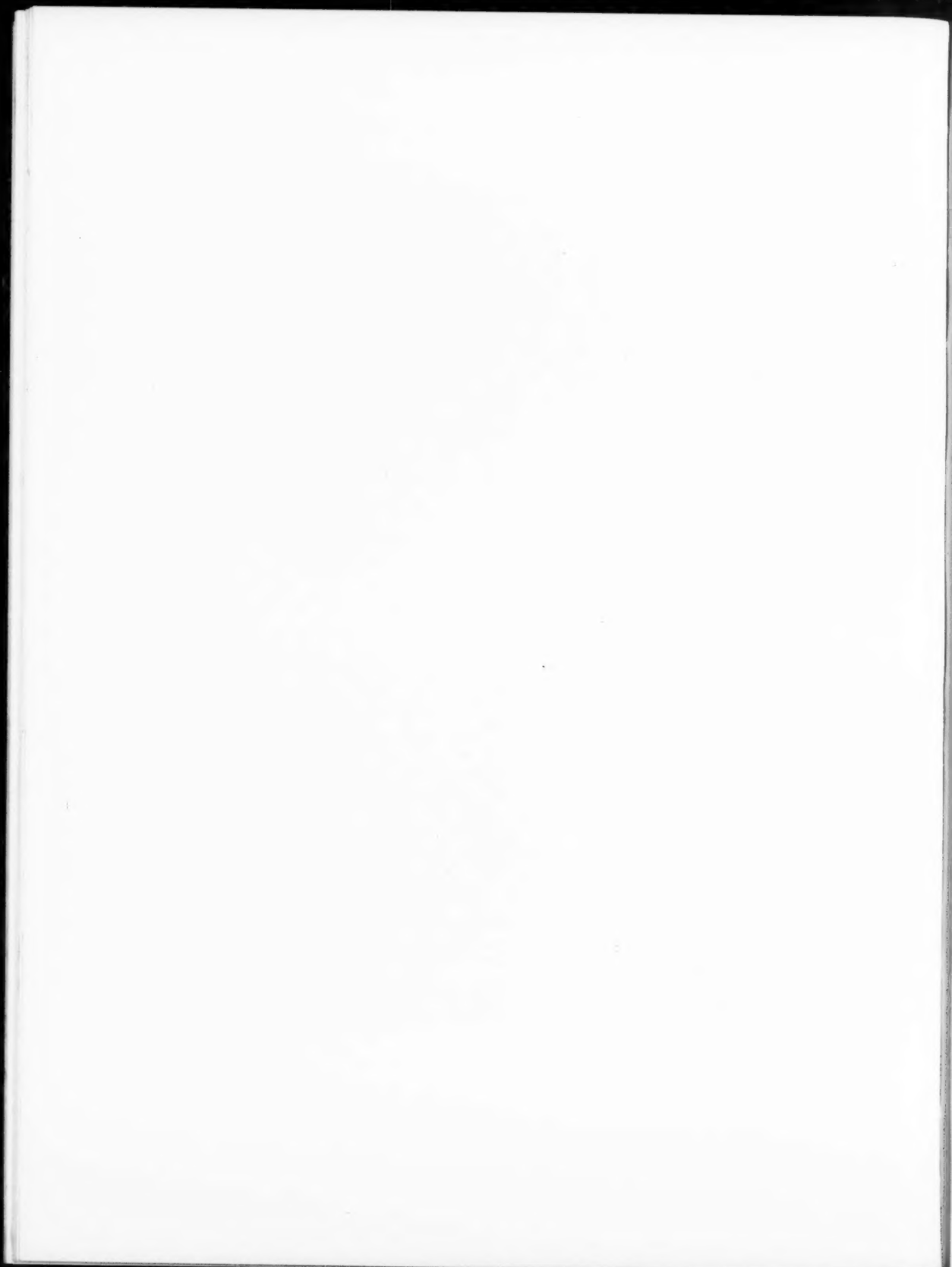
THE MODERN WALL OF JERUSALEM



Plate 28. The East Wall of the Haram, South of the Golden Gate;
Detail.



Plate 33. The East Wall of the Haram, just South of the
Northeast Tower.



THE MODERN WALL OF JERUSALEM

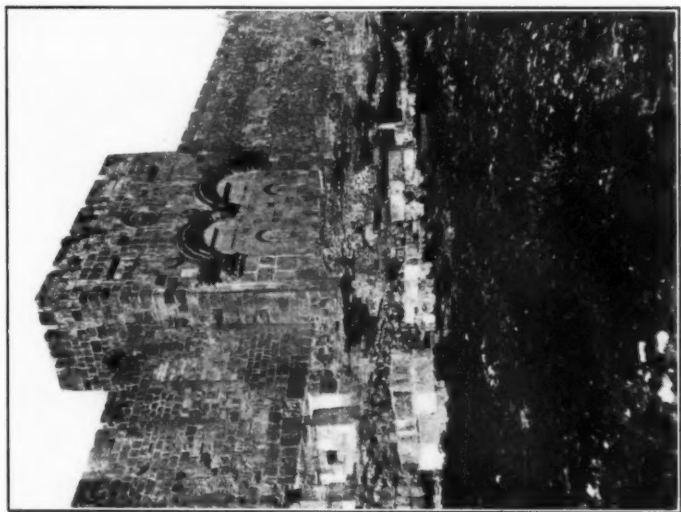


Plate 30. The Golden Gate.

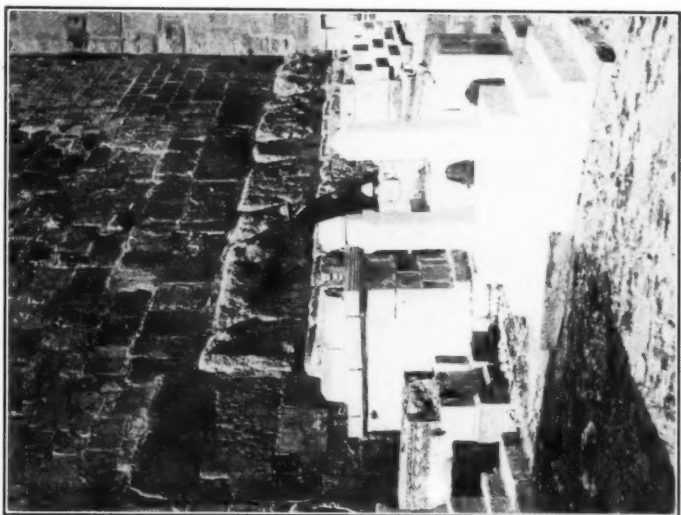
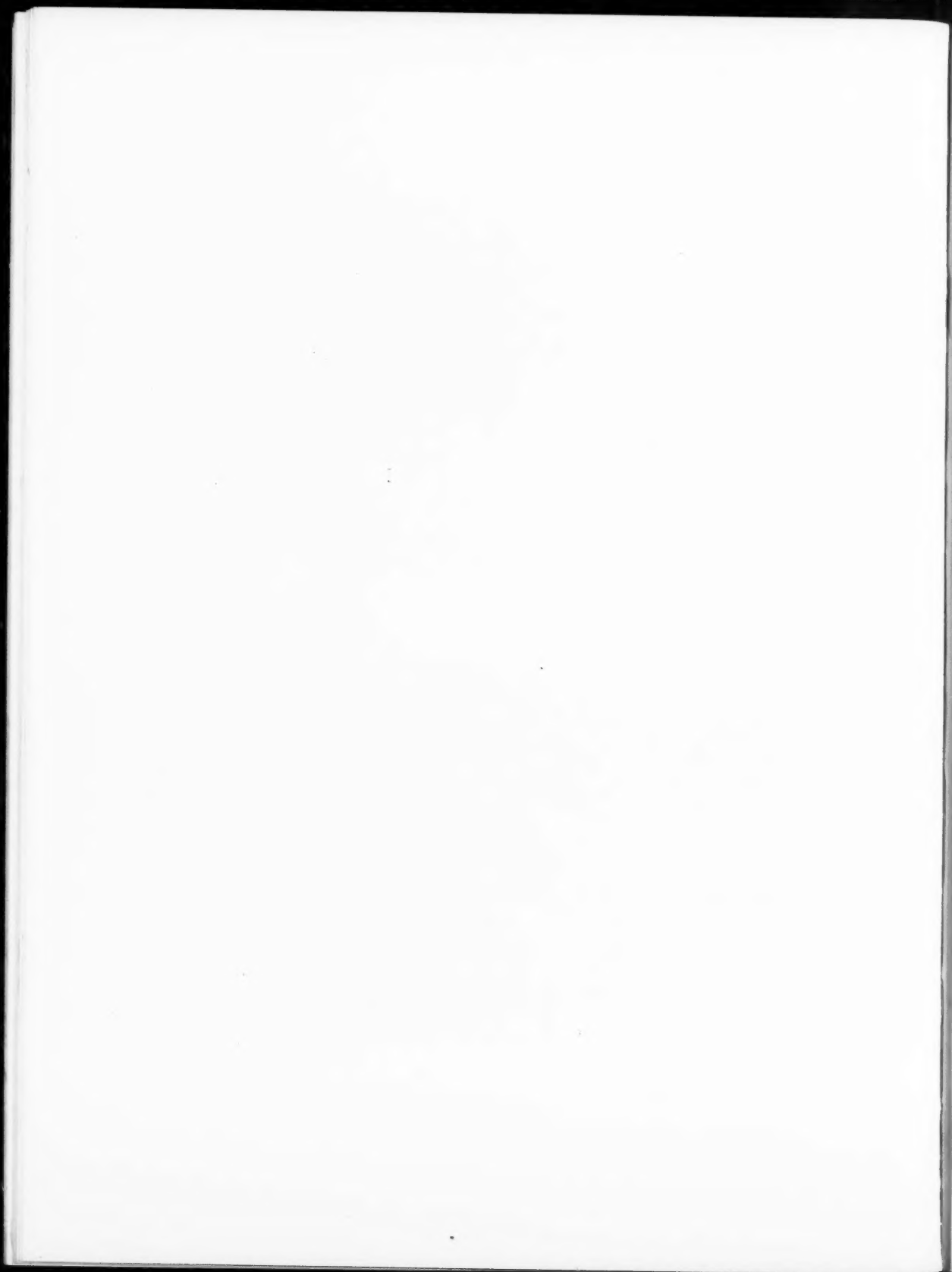


Plate 29. The East Wall of the Haram, just South of the Golden Gate.



THE MODERN WALL OF JERUSALEM

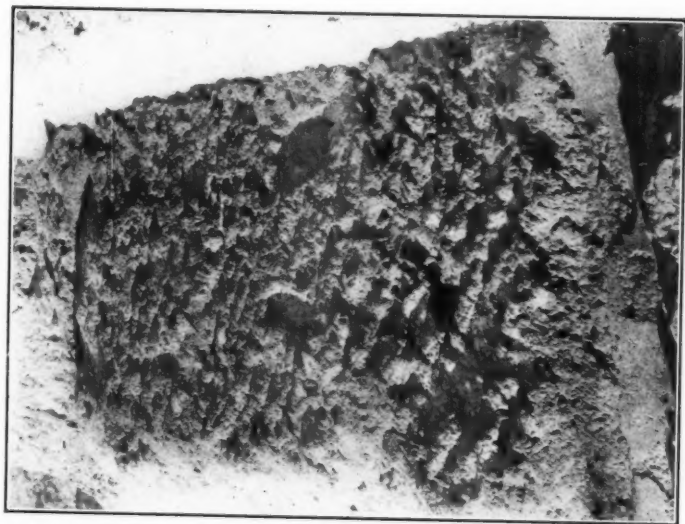


Plate 32. The East Wall of the Haram, North of the Golden Gate.

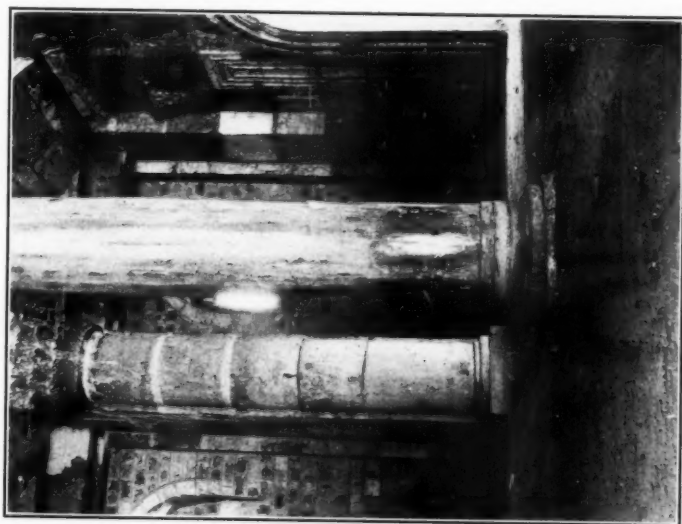
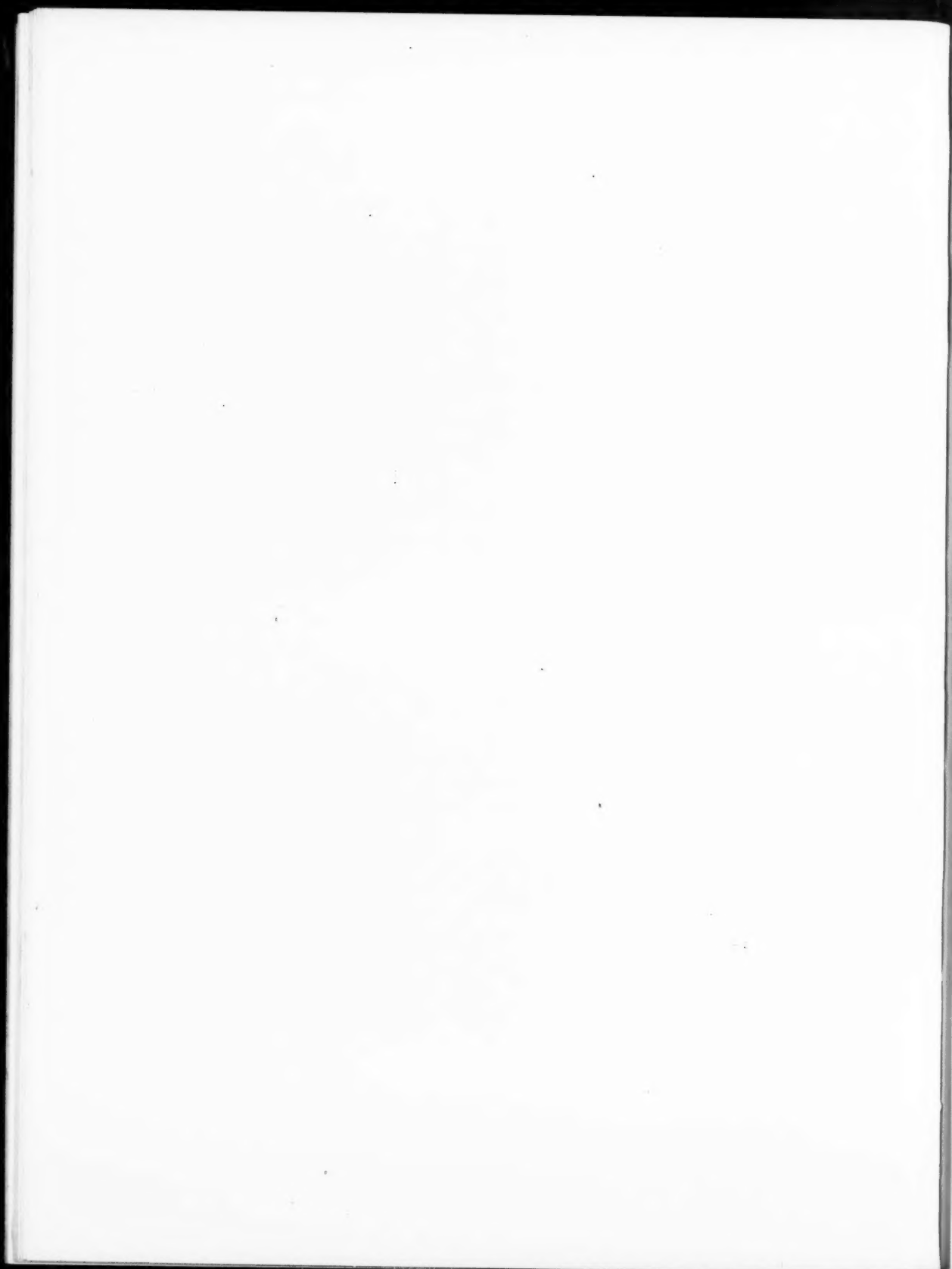


Plate 31. The Golden Gate, Inside.



THE MODERN WALL OF JERUSALEM

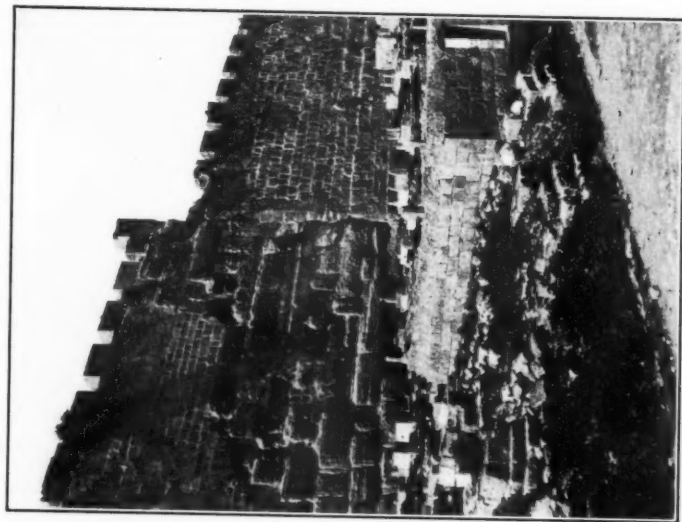
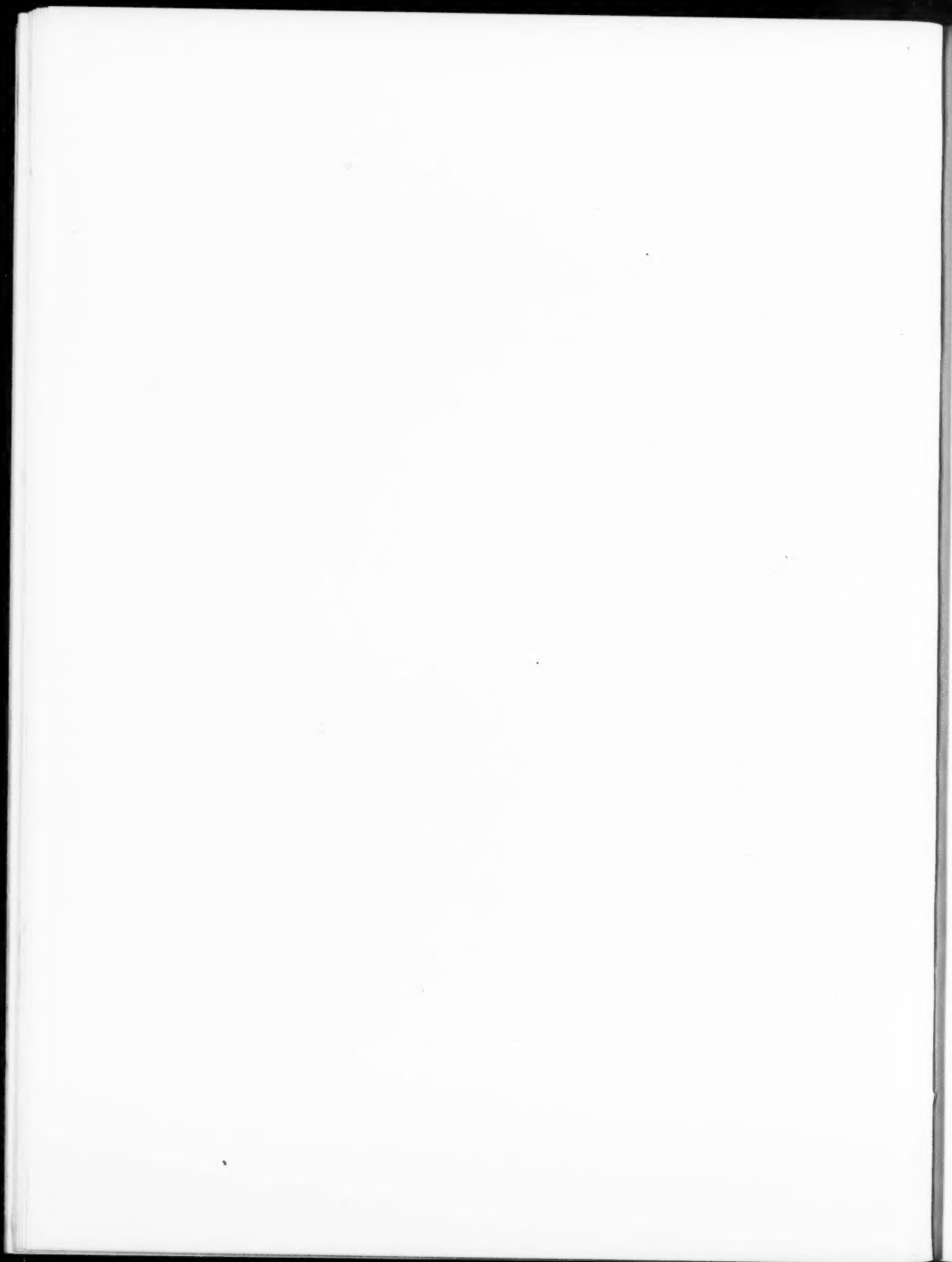


Plate 35. The Northeast Corner of the Haram and Beyond.



Plate 34. The East Wall of the Haram; the Tower at the Northeast Corner.



THE MODERN WALL OF JERUSALEM

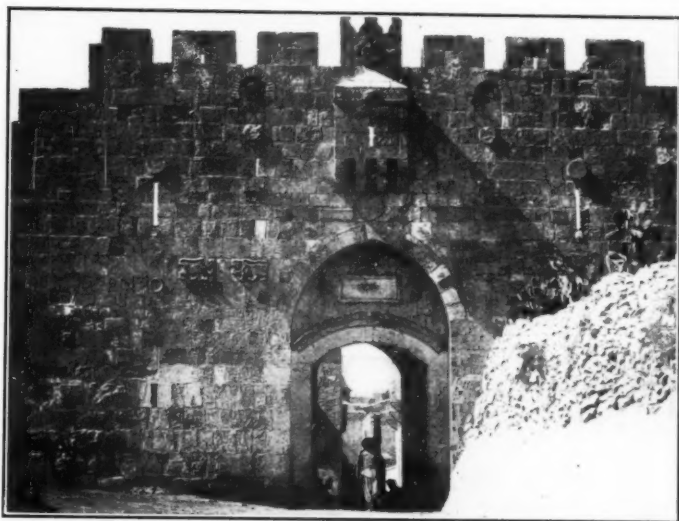
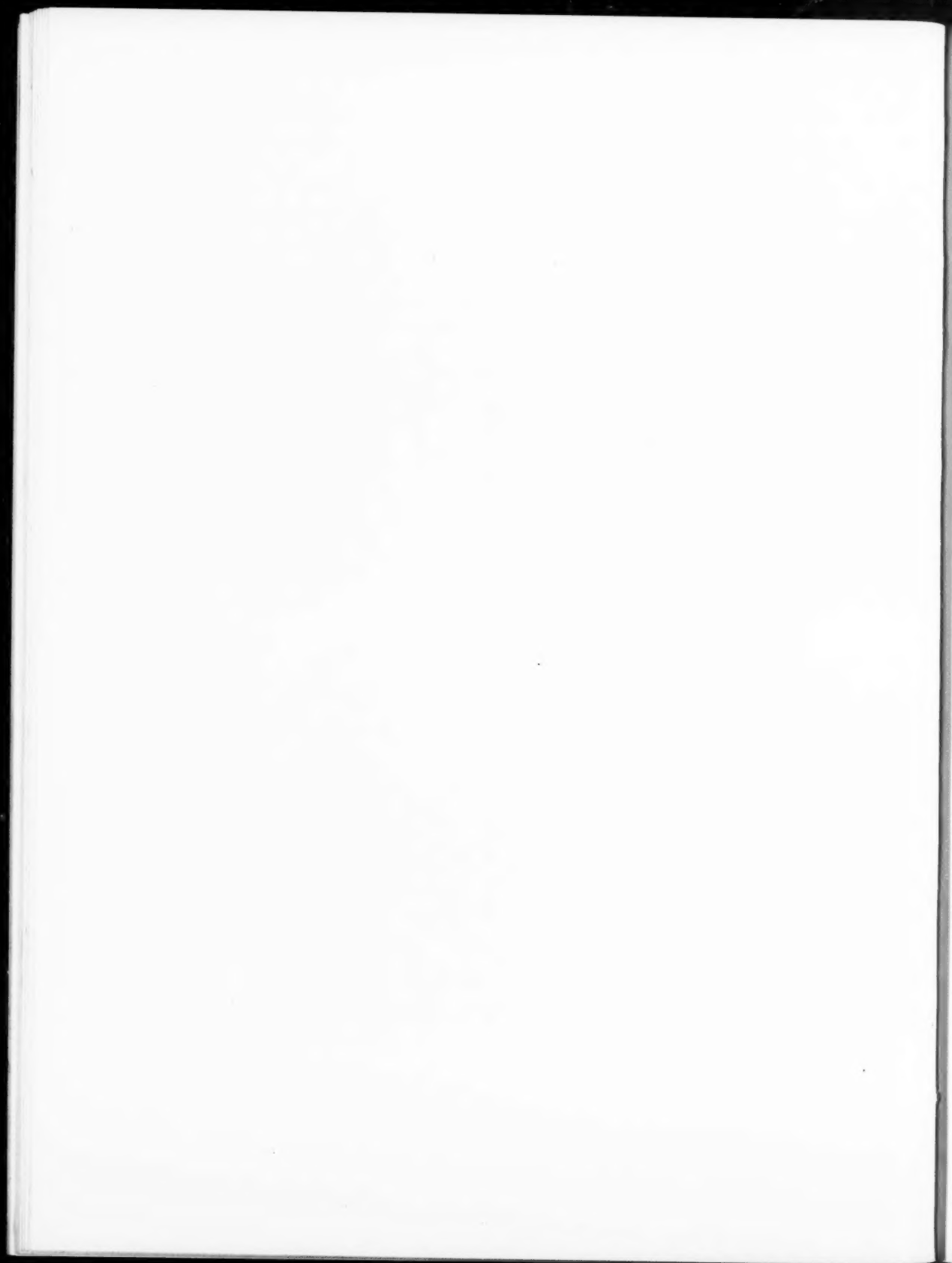


Plate 36. Stephen's Gate.



Plate 37. The East Wall, just North of Stephen's Gate.



THE MODERN WALL OF JERUSALEM

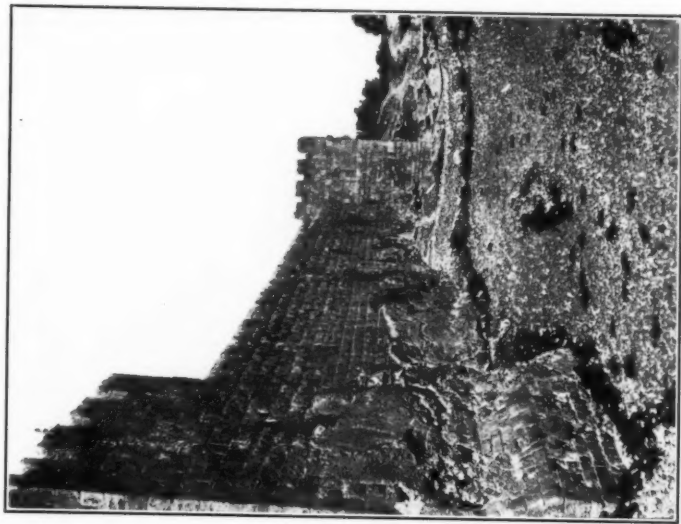


Plate 39. The East Wall, near the Northeast Corner.

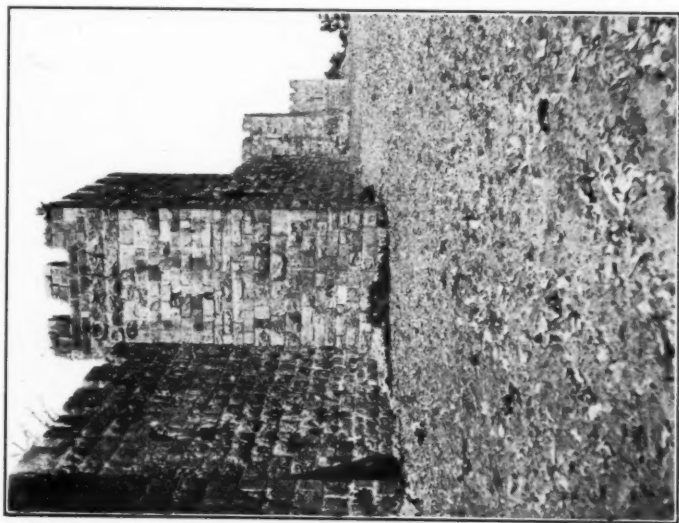
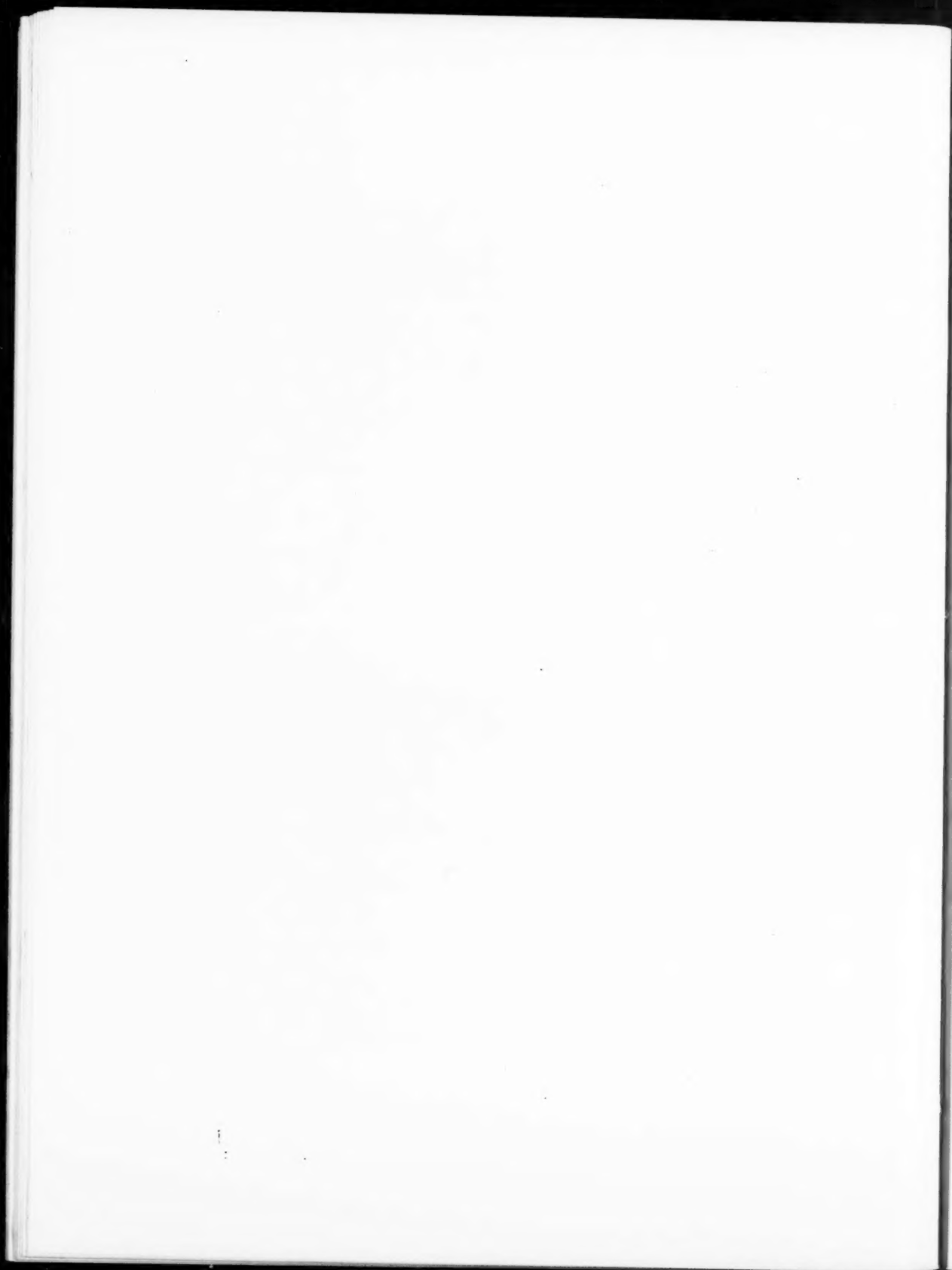


Plate 38. The East Wall, toward the Northeast Corner.



THE MODERN WALL OF JERUSALEM

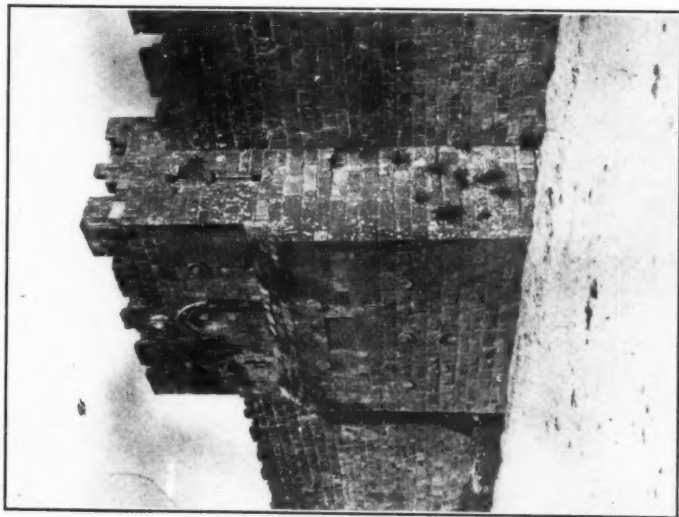
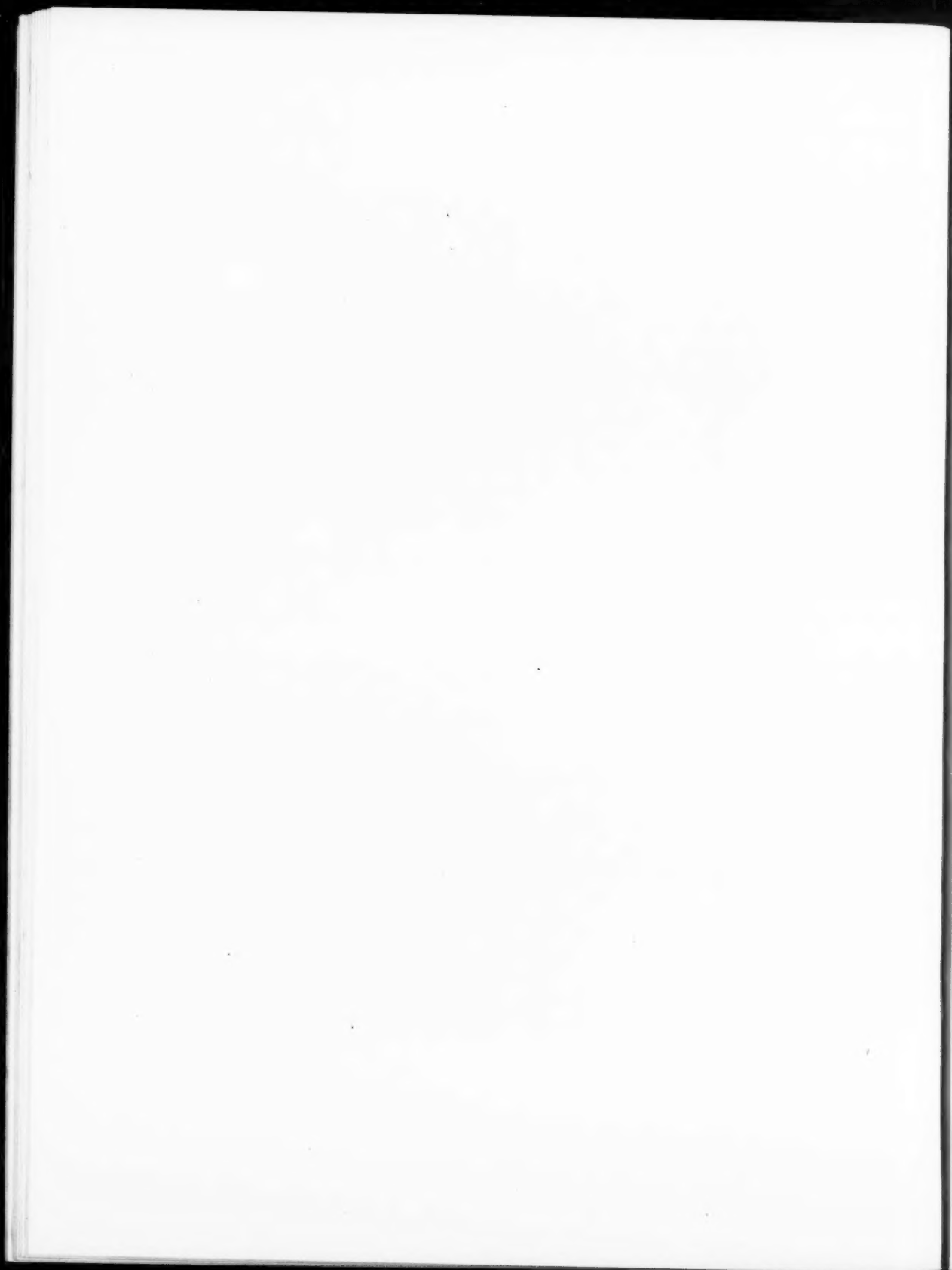


Plate 41. The North Wall, the Third Tower East of Herod's Gate.



Plate 40. The North Wall, toward the Northeast Corner.



THE MODERN WALL OF JERUSALEM

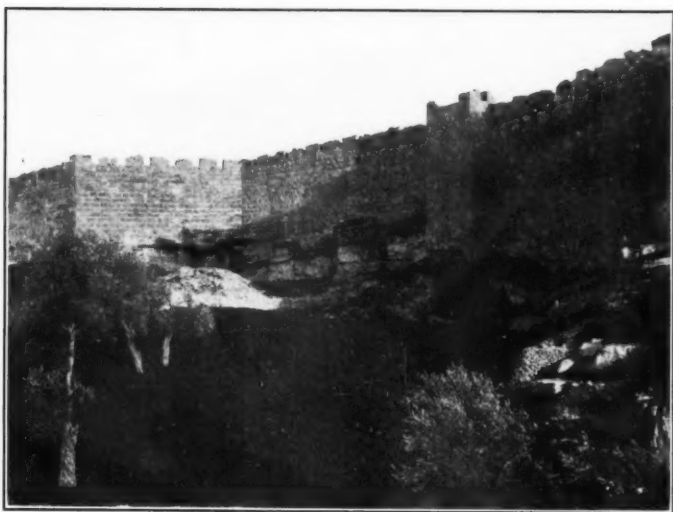


Plate 42. The North Wall, West of Herod's Gate.

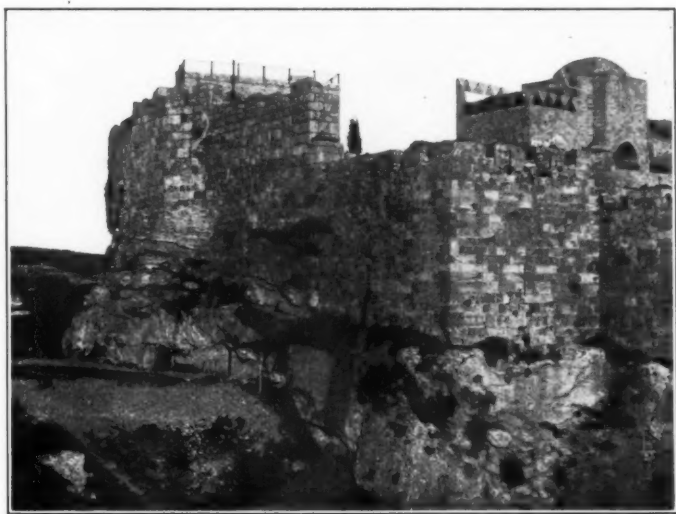
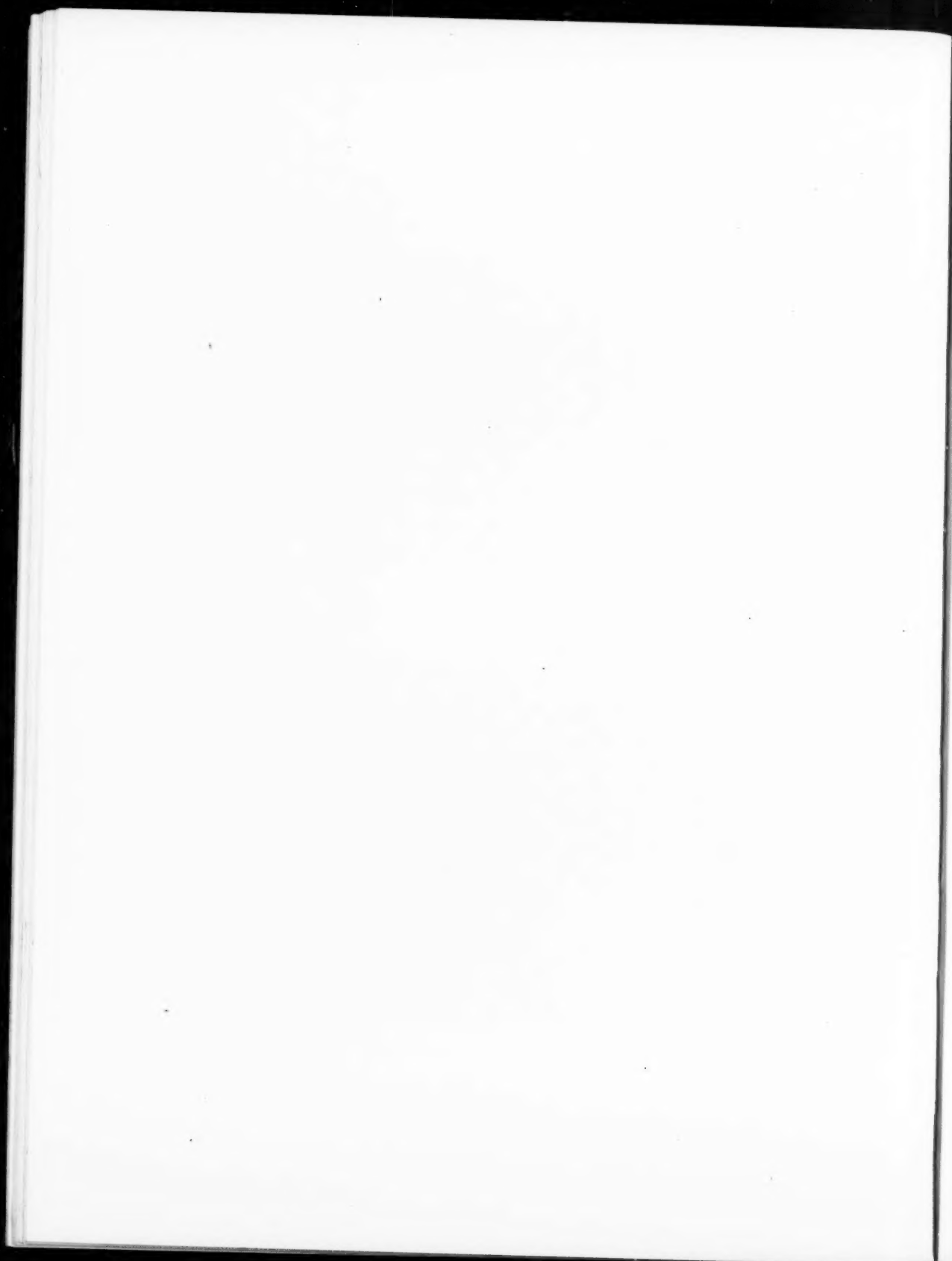


Plate 43. The North Wall, over the Cotton Grotto.



THE MODERN WALL OF JERUSALEM



Plate 44. The Damascus Gate.



Plate 45. The Damascus Gate; Detail.

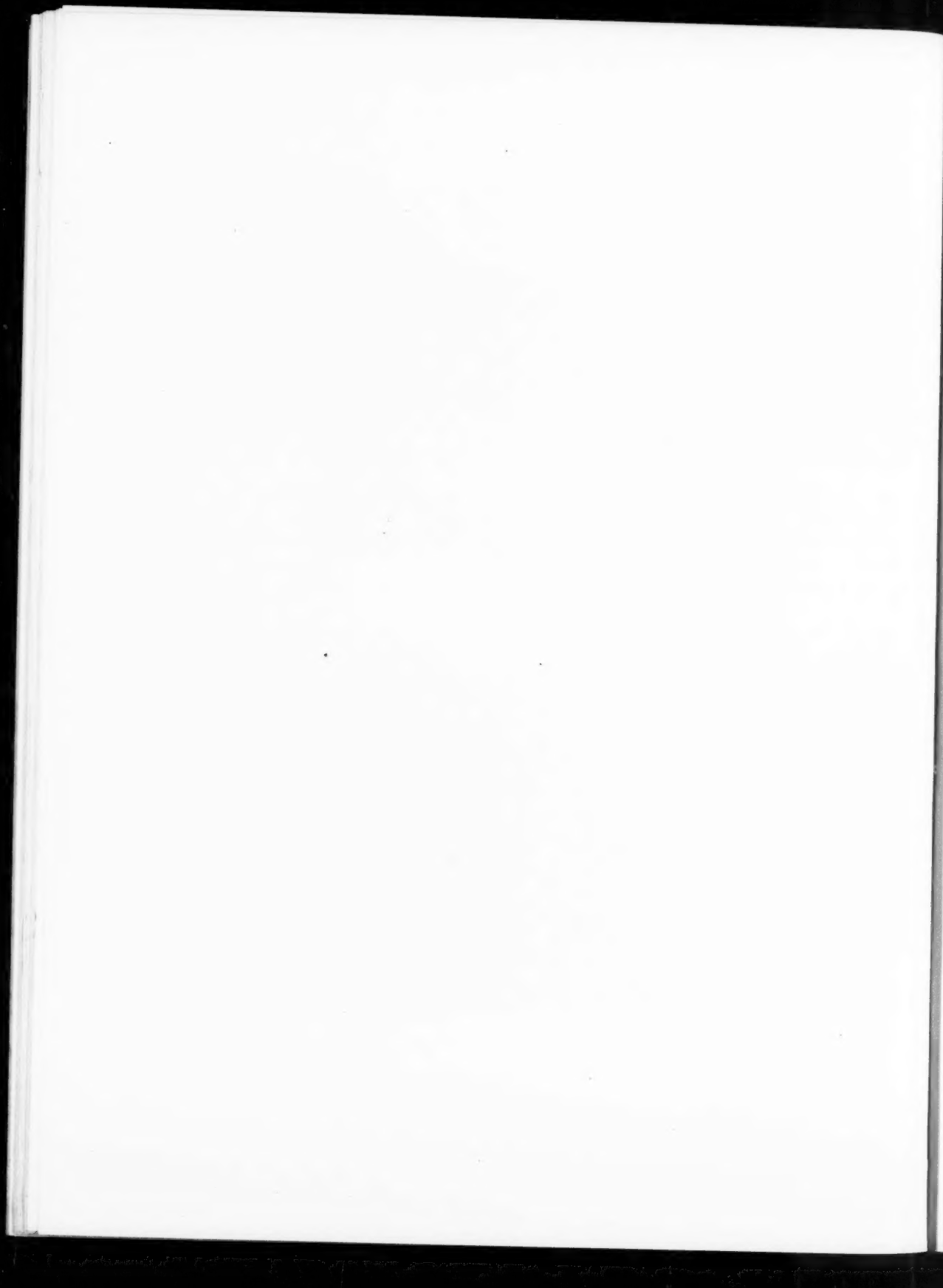
THE MODERN WALL OF JERUSALEM



Plate 46. The North Wall, West of the Damascus Gate.



Plate 47. The North Wall, East of the New Gate.



THE MODERN WALL OF JERUSALEM

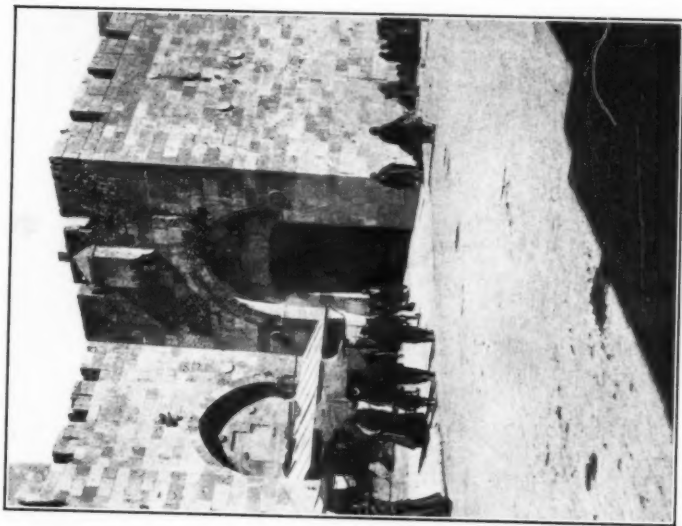


Plate 49. The Jaffa Gate.

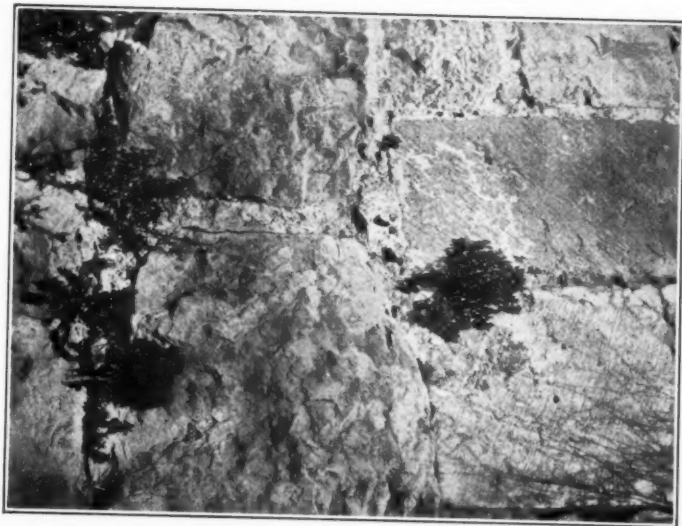


Plate 48. The West Wall, North of the Jaffa Gate.



THE MODERN WALL OF JERUSALEM

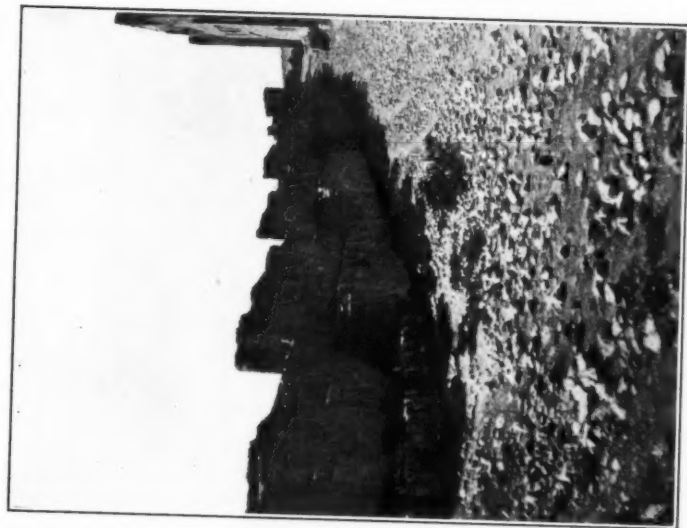


Plate 51. The South Wall, Inside, East of David's Gate.

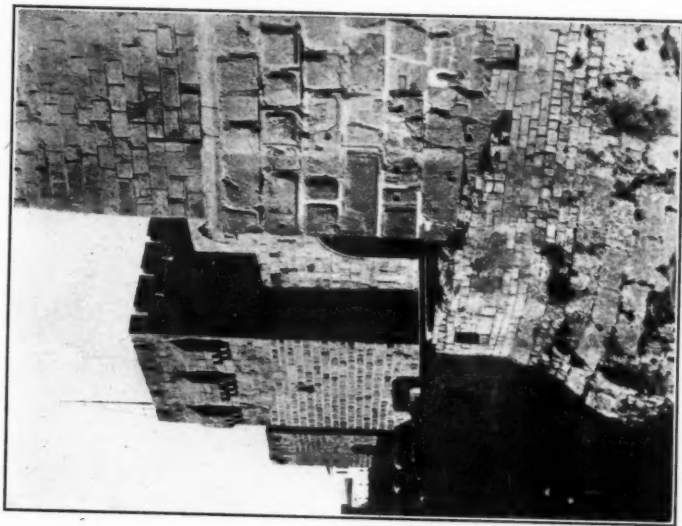
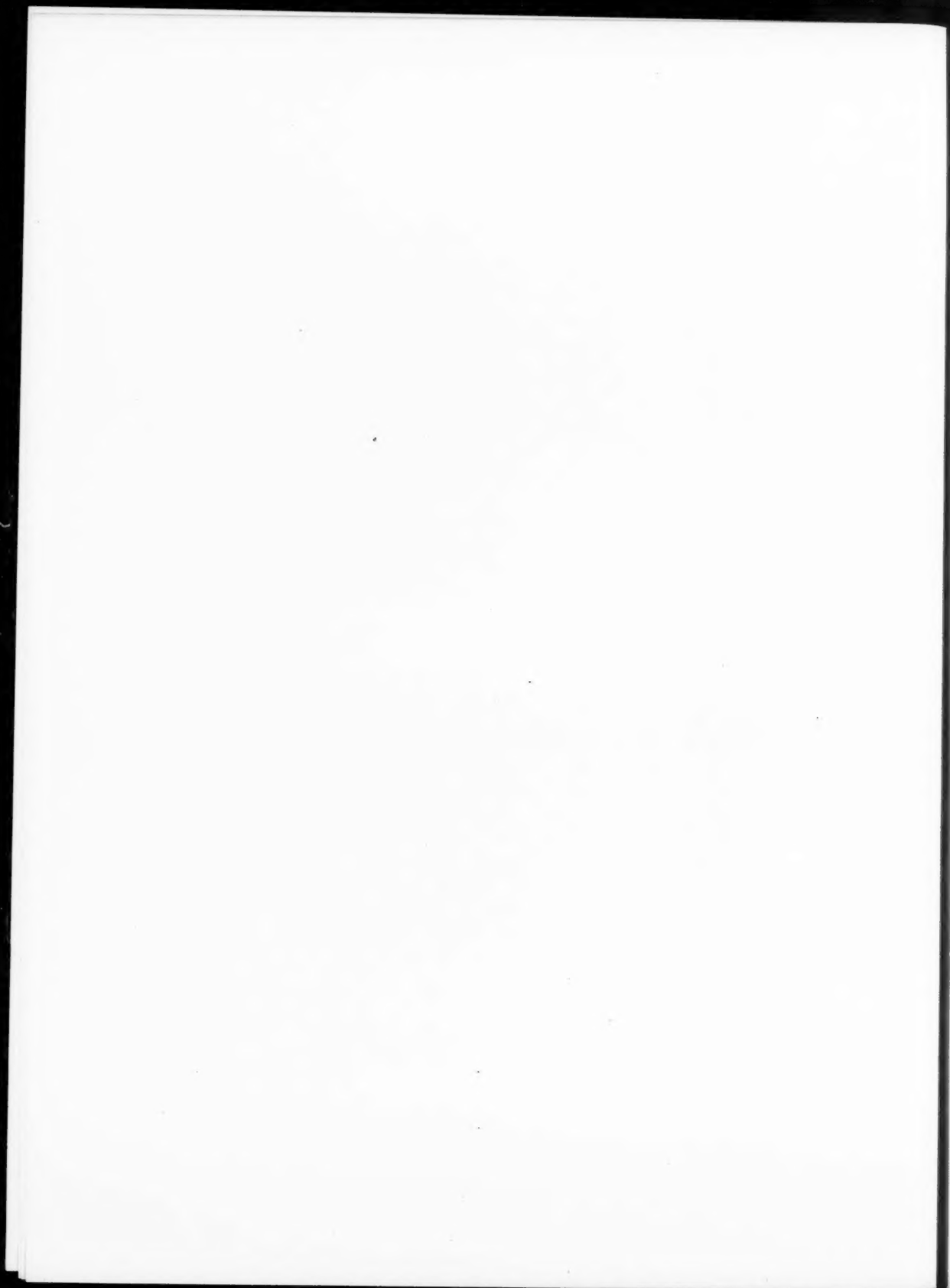


Plate 50. The Tower of David.



THE MODERN WALL OF JERUSALEM

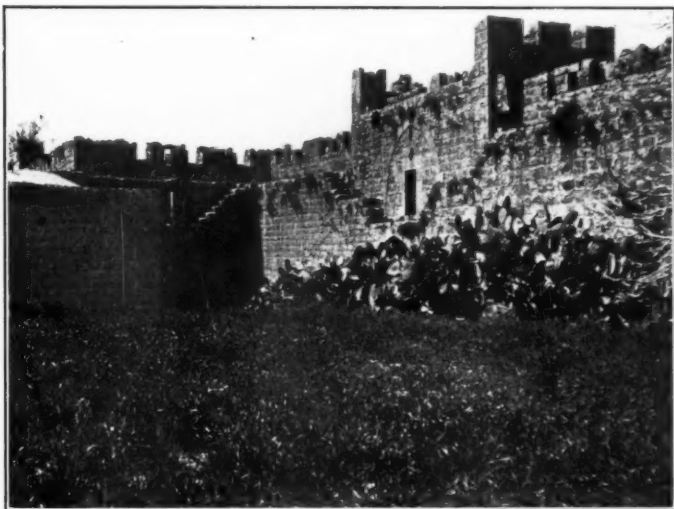
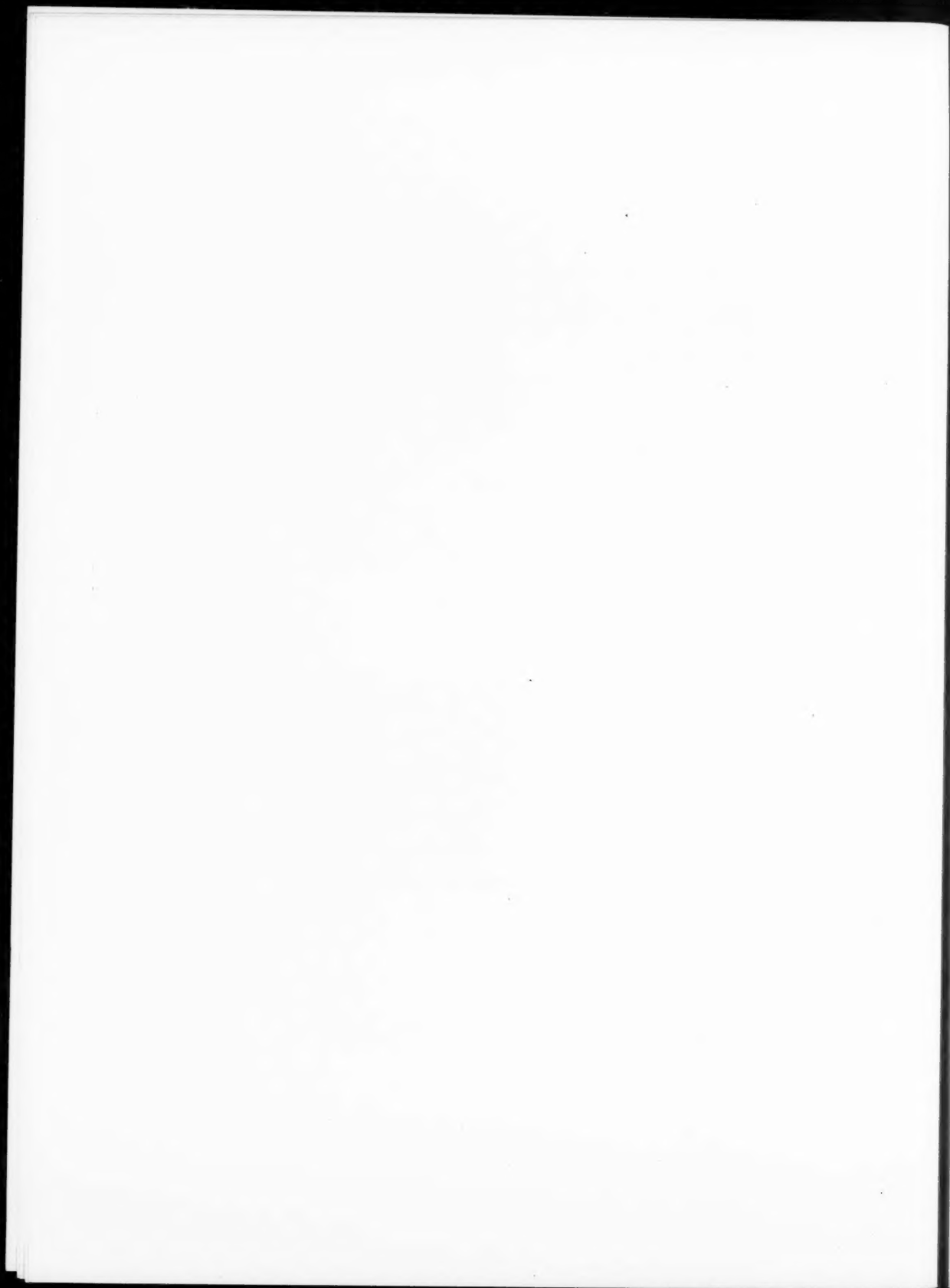


Plate 52. The Northeast Corner of the City, Inside.



Plate 54. The North Wall, Inside, just East of the Damascus Gate.



THE MODERN WALL OF JERUSALEM



Plate 55. The Castle of Goliath.

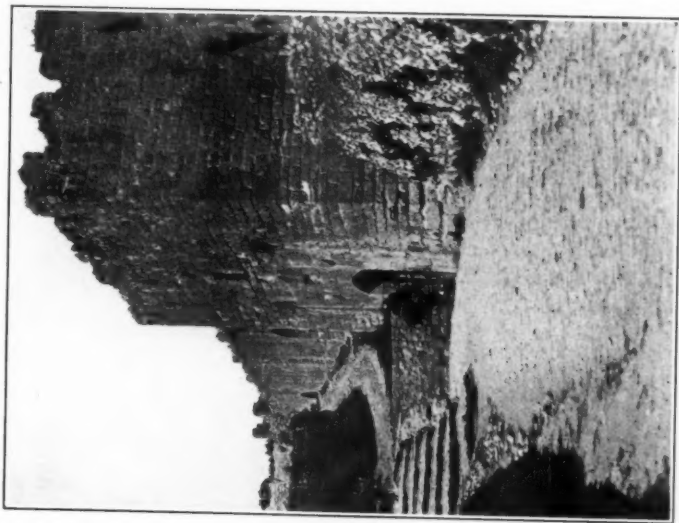
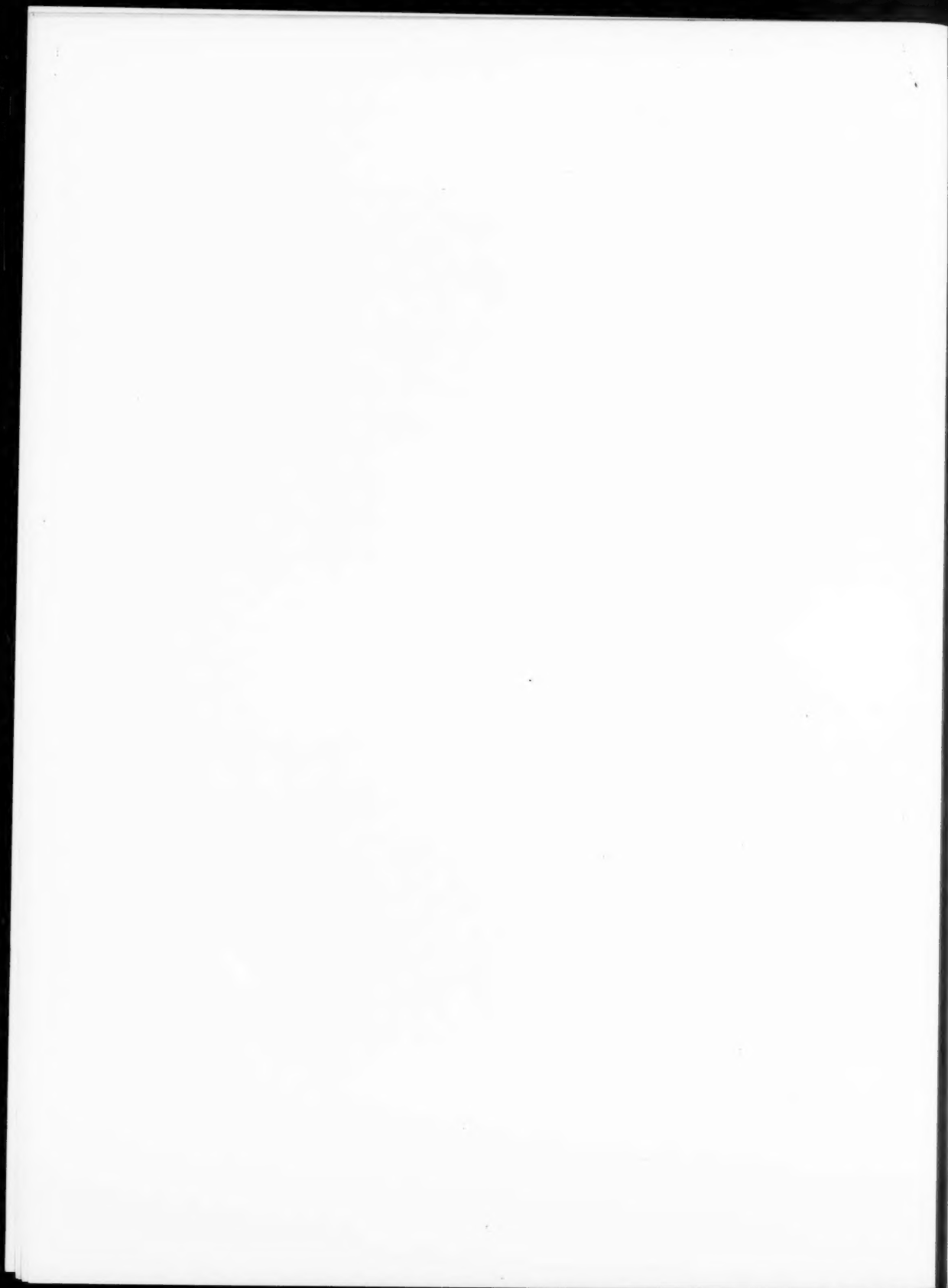


Plate 53. Herod's Gate, Inside.



THE MODERN WALL OF JERUSALEM



Plate 56. Remains of an Ancient Church, East of the Church of the Sepulchre.

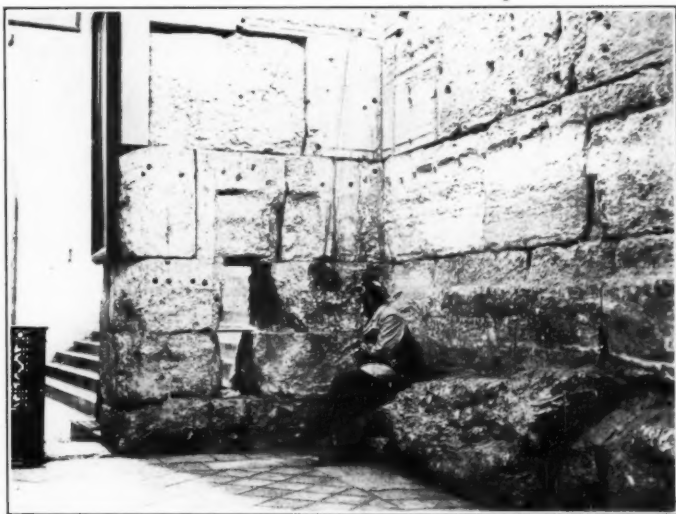
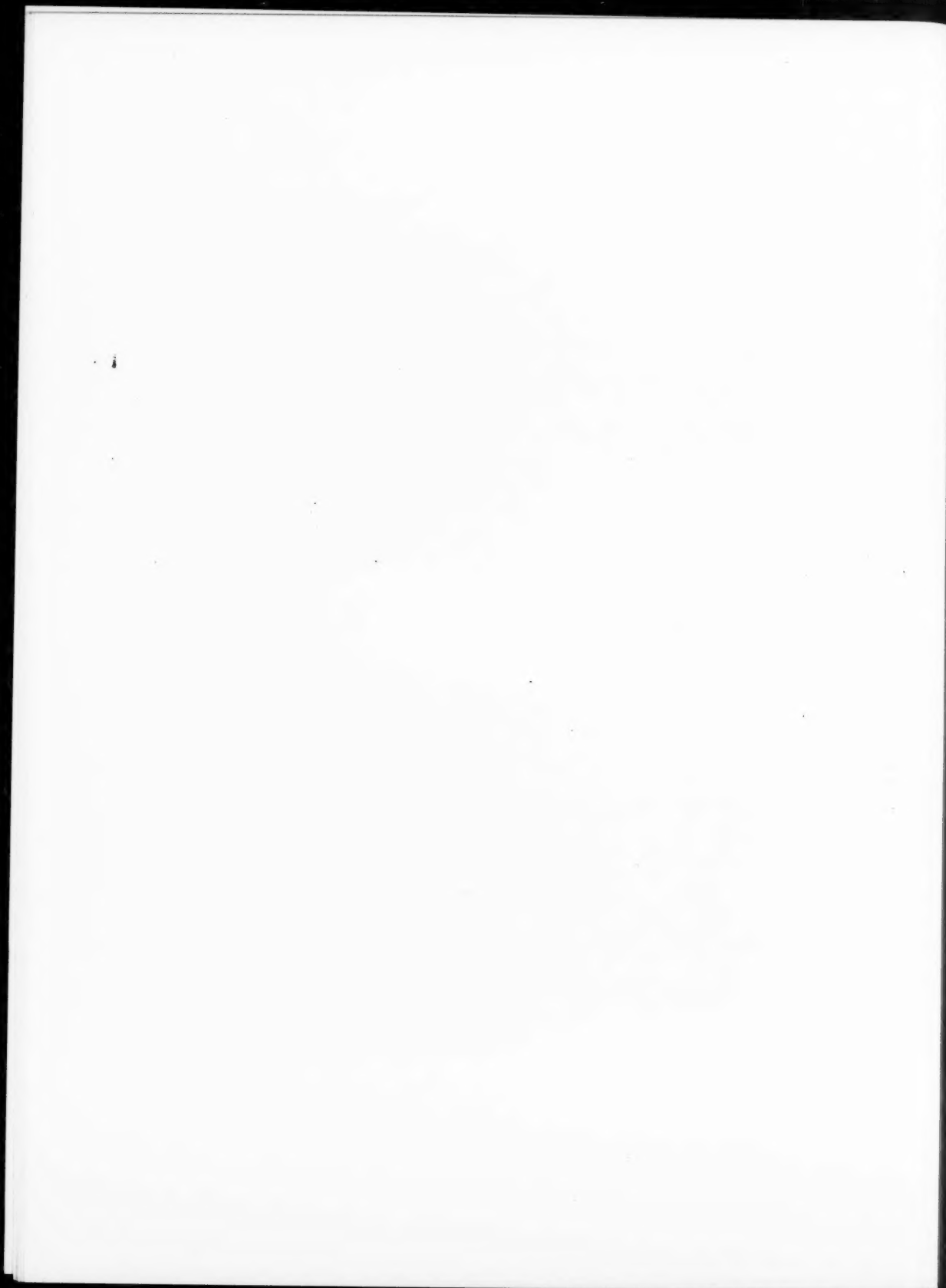


Plate 57. Remains of an Ancient Church, East of the Church of the Sepulchre.



THE MODERN WALL OF JERUSALEM

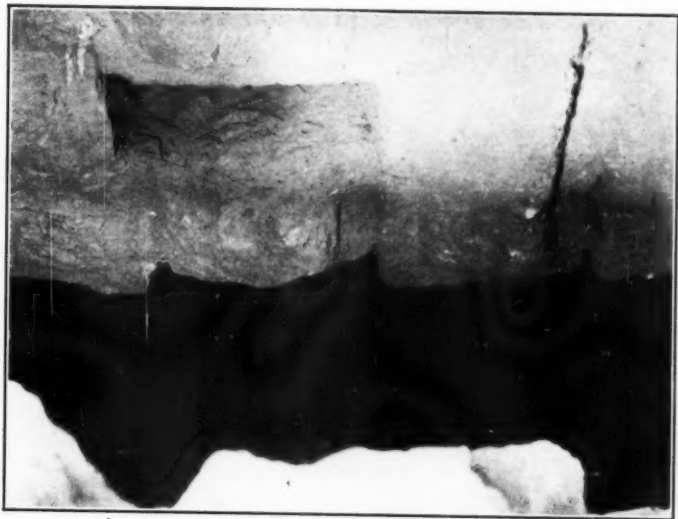


Plate 62. Remains of a Tower at the Southeast Corner of the Ancient City.

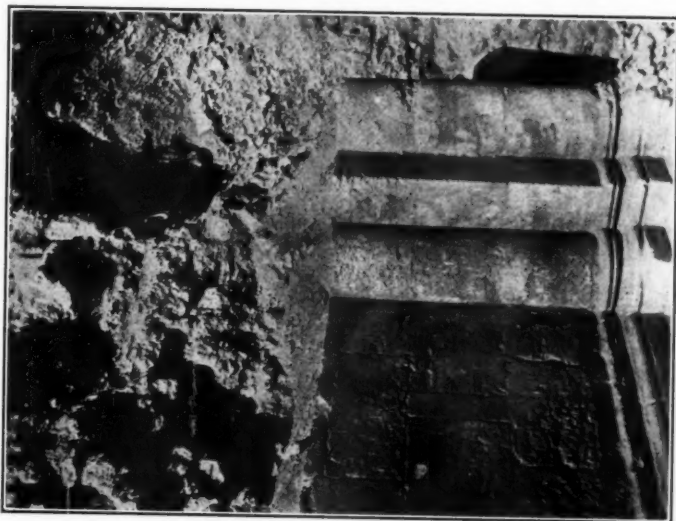


Plate 58. Remains of Crusading Architecture in the Muristan.

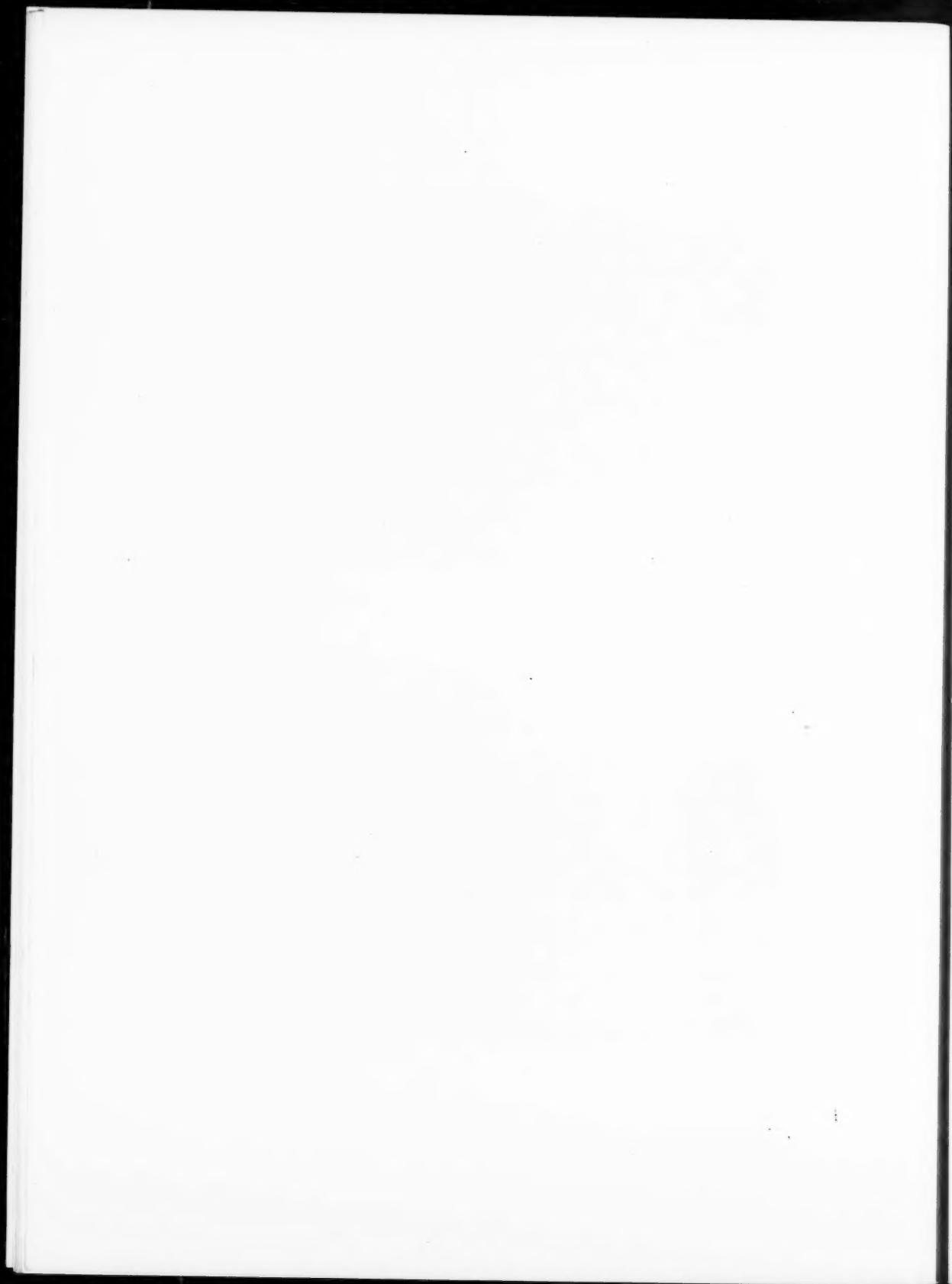
THE MODERN WALL OF JERUSALEM



Plate 59. Stones Excavated on the Site of the English School.



Plate 60. Remains of a Wall on Maudslay's Scarp.



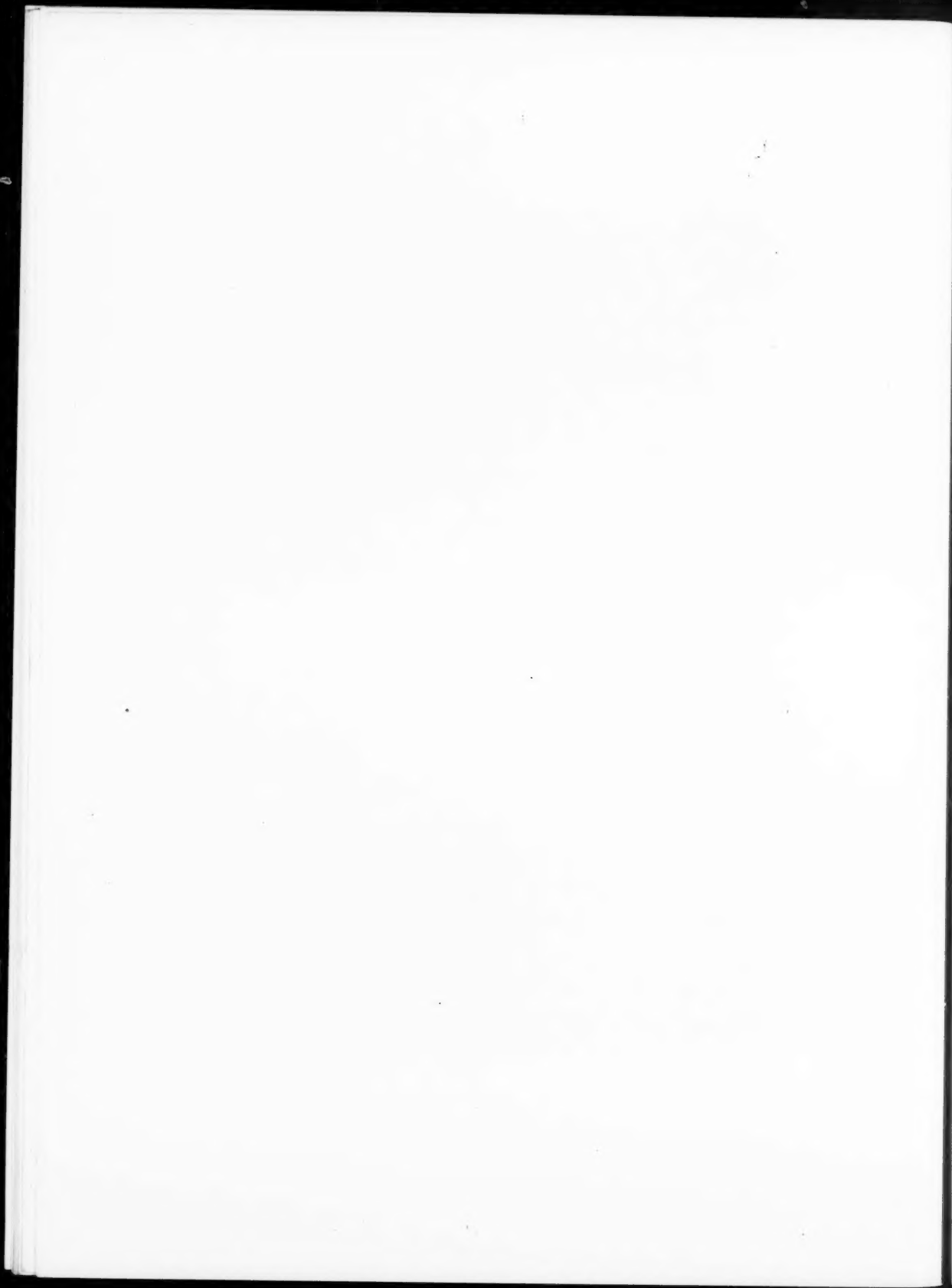
THE MODERN WALL OF JERUSALEM



Plate 61. Remains of a Tower East of the Protestant Cemetery.



Plate 63. Remains of a Building at Kaloniyeh.



THE MODERN WALL OF JERUSALEM

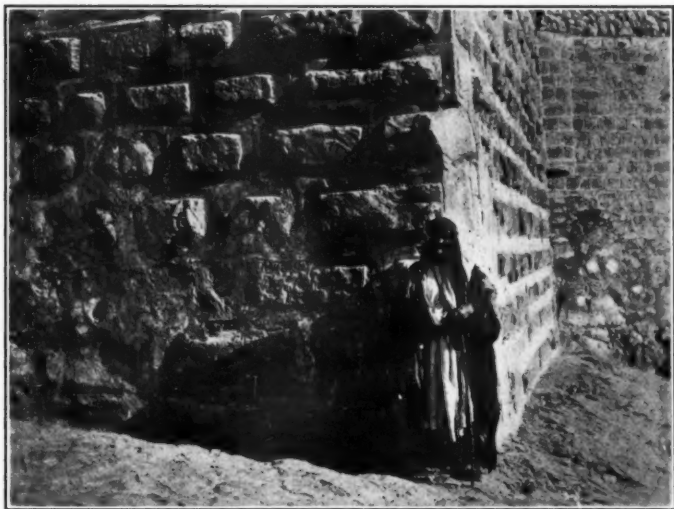


Plate 64. A Wall in the Monastery at Mar Saba.

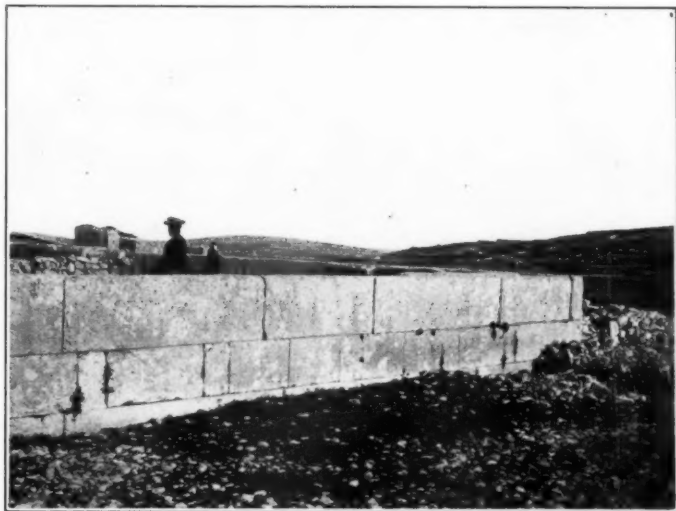
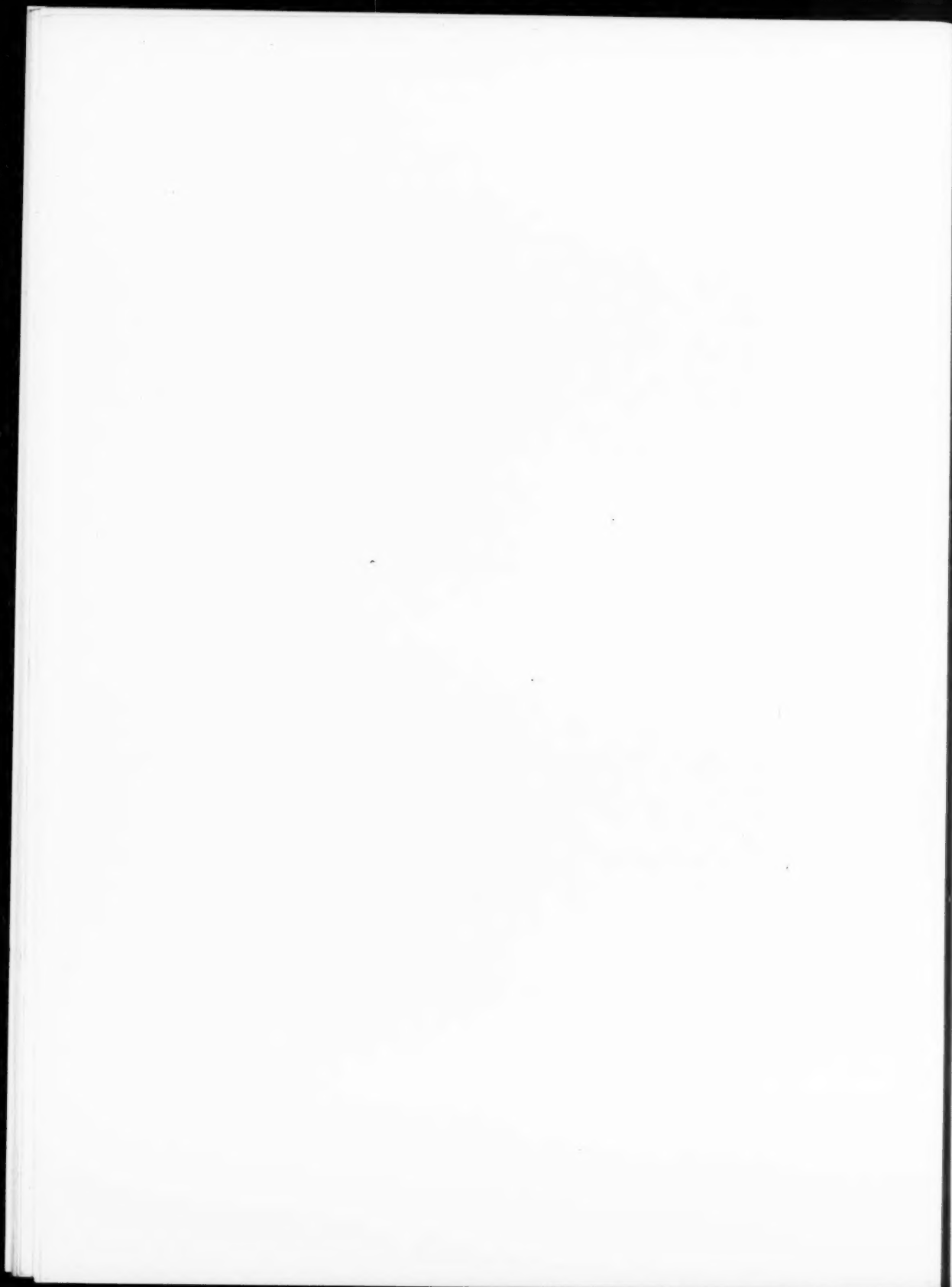


Plate 65. An Unfinished Structure at Ramet el-Halil.



THE MODERN WALL OF JERUSALEM



Plate 66. The Palace of Hyrcanus at Arak el-Emir.

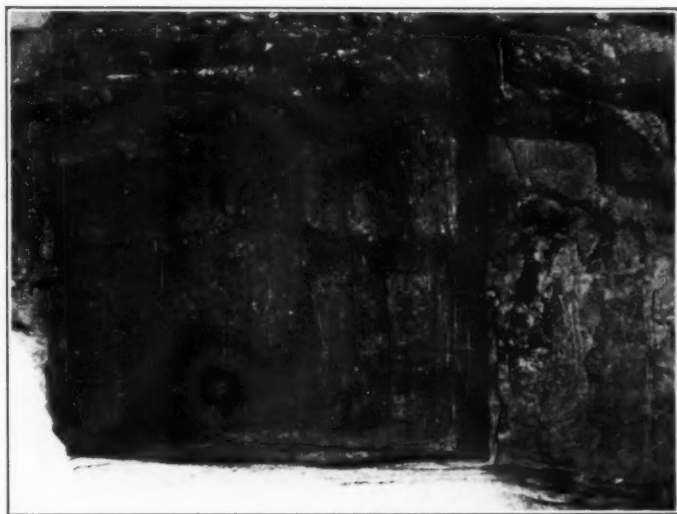
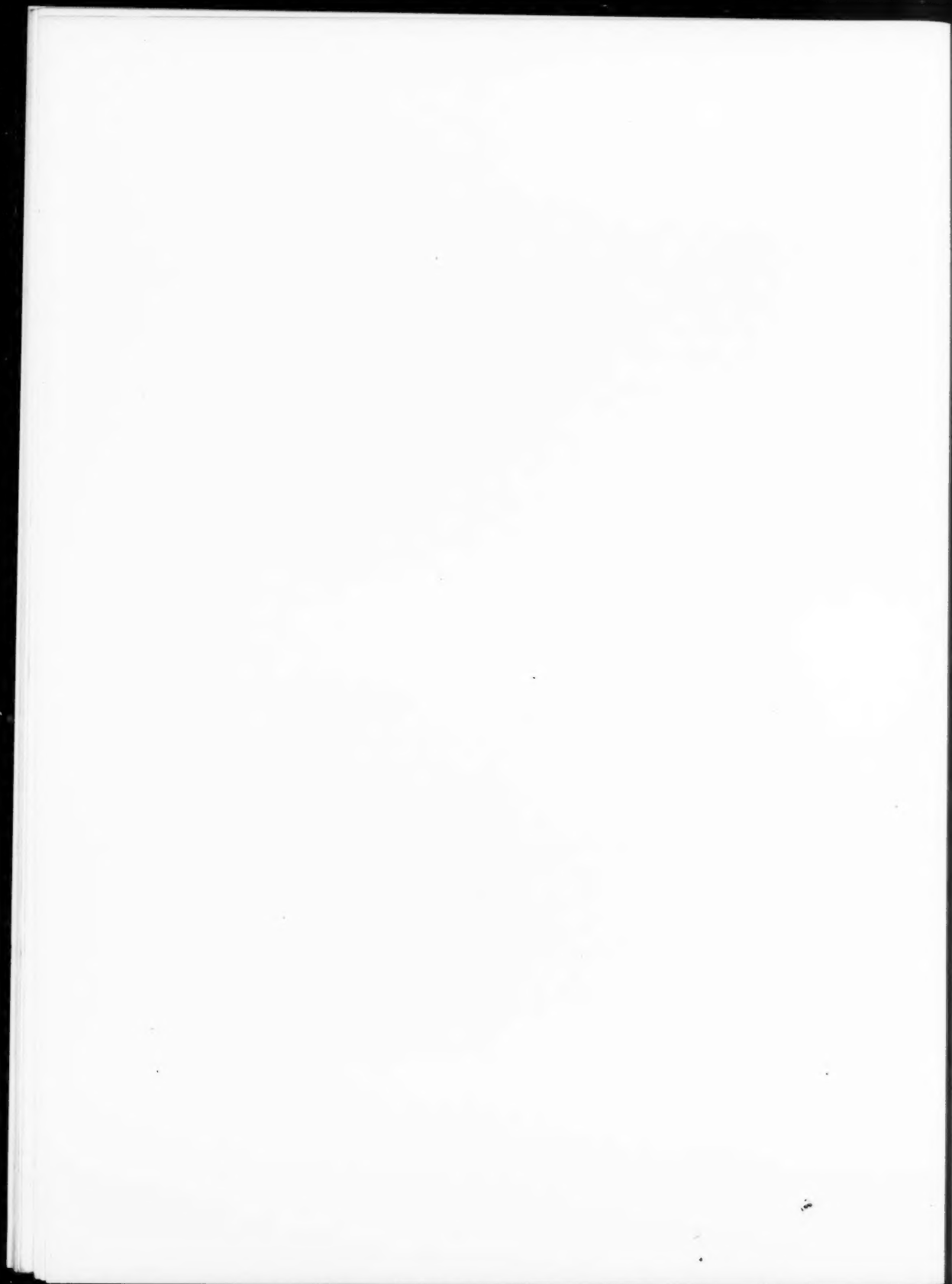


Plate 67. The Cotton Grotto.



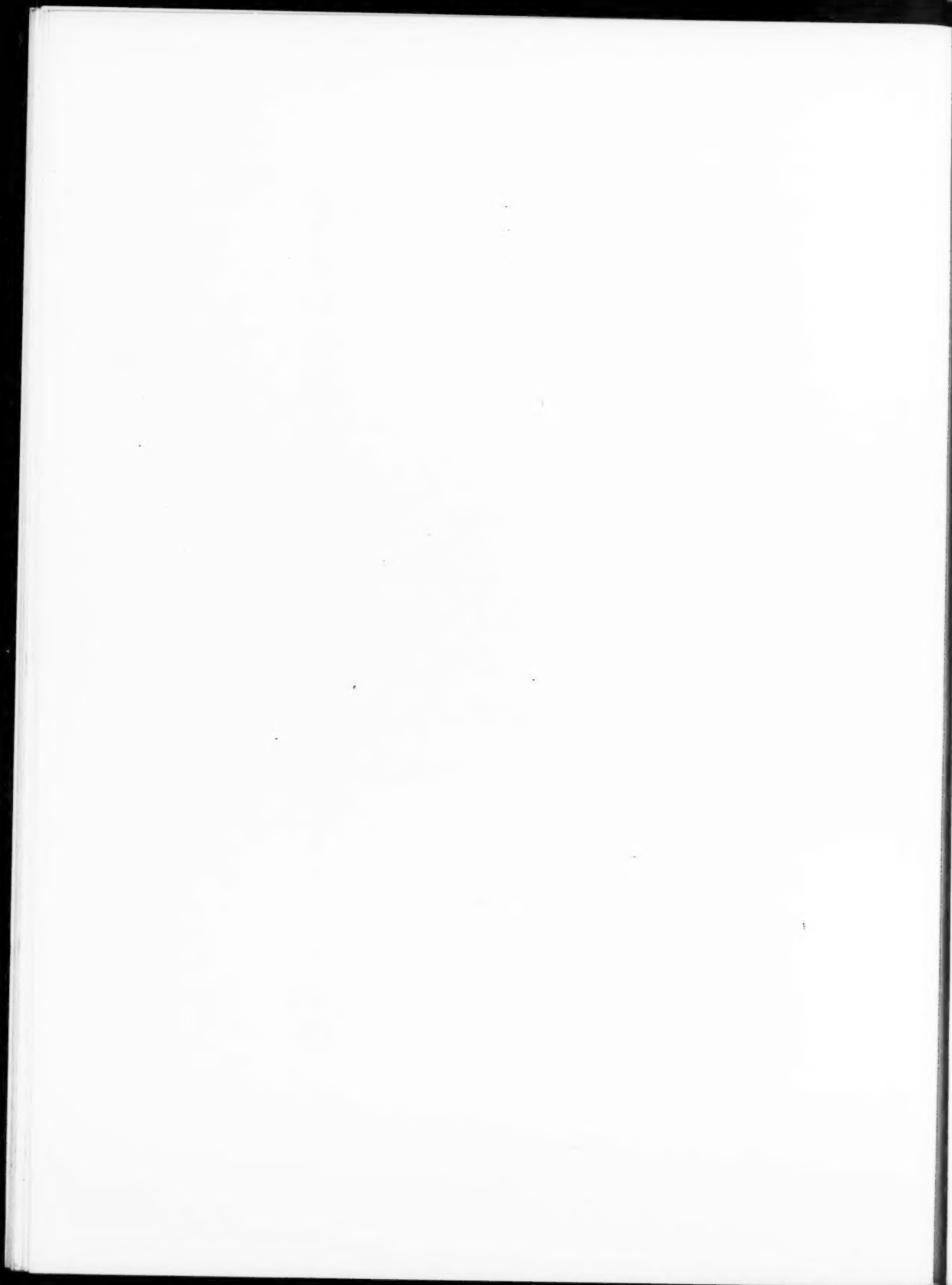
THE MODERN WALL OF JERUSALEM



Plate 68. The Cotton Grotto.



Plate 70. A Winepress in a Quarry, Northwest of Jerusalem.



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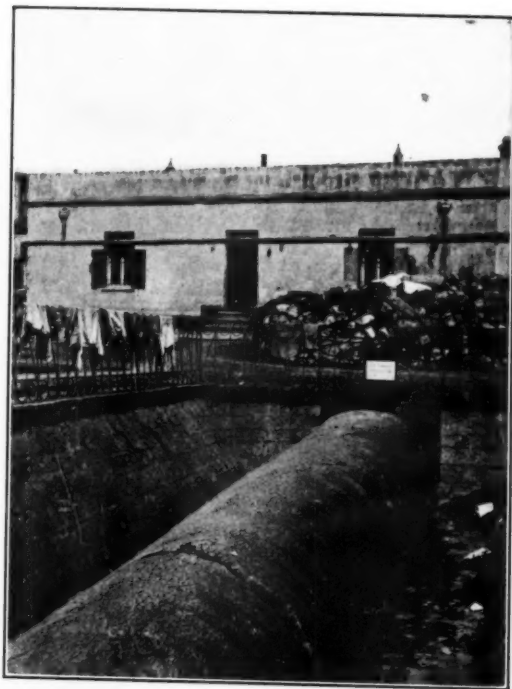
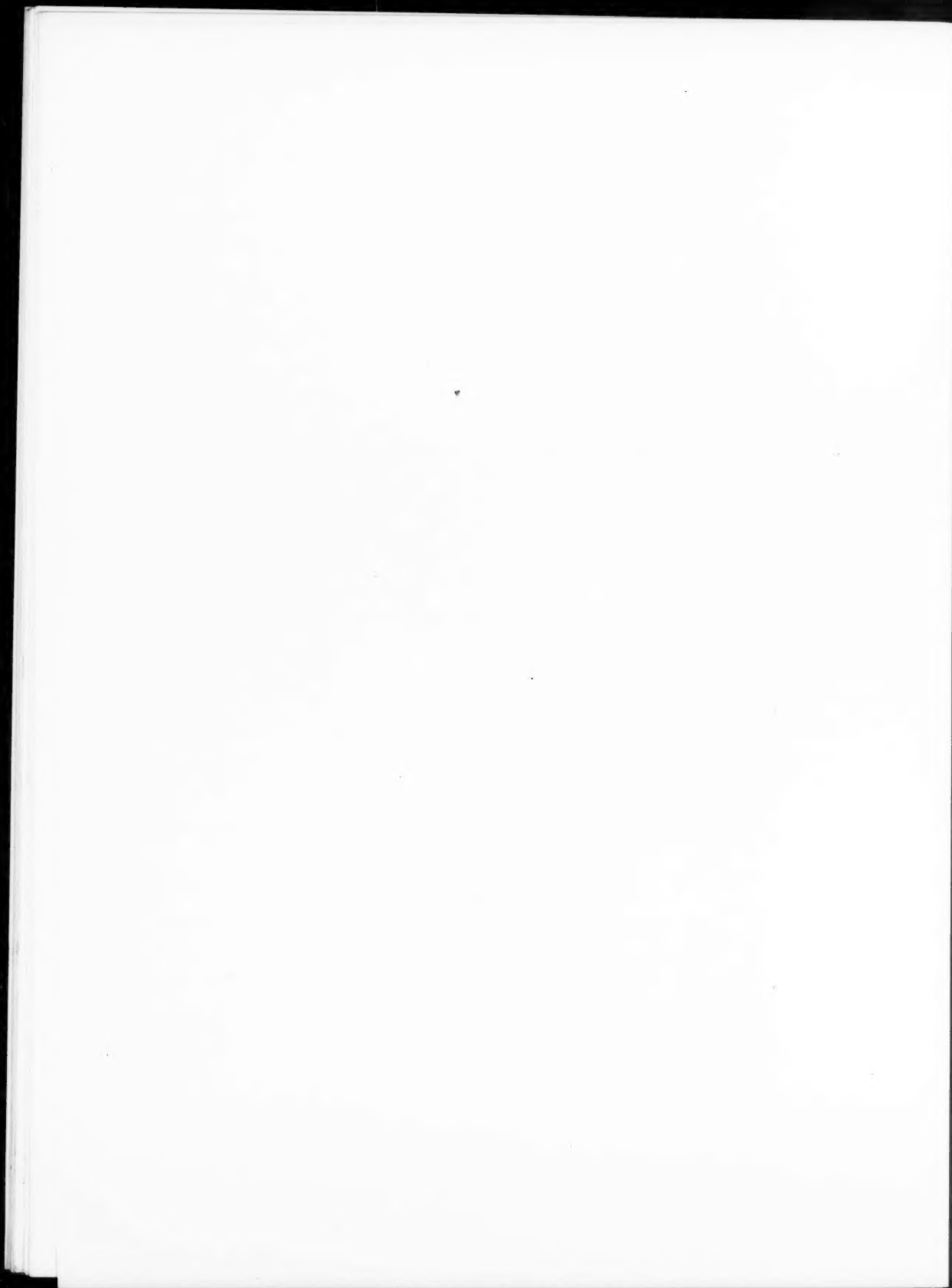


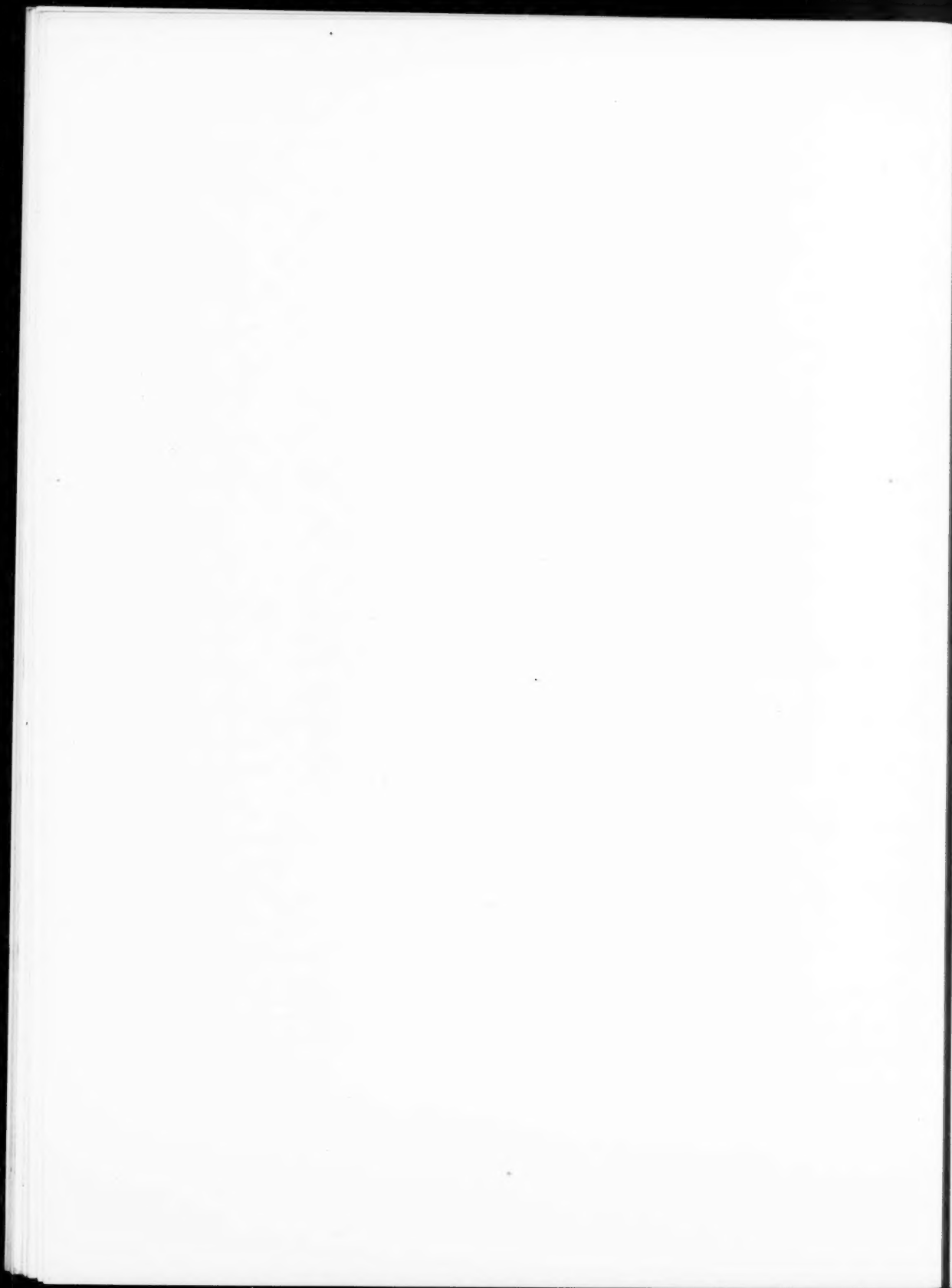
Plate 69. An Abandoned Column.



THE MODERN WALL OF JERUSALEM



Plate 71. Stonecutters at Ramallah.



SURVIVALS OF PRIMITIVE RELIGION IN MODERN PALESTINE.

BY LEWIS BAYLES PATON.

Hartford Theological Seminary.

The religion of the Canaanites, as of the other early Semites, was poly-dæmonism, or the worship of an immense number of powers that presided over all sorts of phenomena. These divinities were believed to dwell in springs, trees, mountain-tops, caves, and tombs; and, therefore, were known as their *bē'ālīm*, or "proprietors." Where one of them manifested himself a "high place" was established, enclosed with a wall, or line of stones to guard the holiness of the spot. As a point of contact with the deity a *maṣṣēbhā*, or stone pillar, was set up within the sacred precinct. This was known as a *bēth-ēl*, or "house of deity." In the earliest times it served both as idol and as altar.

When the Israelites conquered Canaan and mingled with the earlier inhabitants, at first they worshiped the local divinities of the land. That Israel served the *bē'ālīm* is asserted by J (Jud. 3:5) and by E (Jud. 2:10, 13), as well as by the late Deuteronomic editors of Judges and Samuel. (Jud. 2:7, 11, 12; 3:7; 6:25-32; 8:33; 10:6, 10; I Sam. 7:3 f.; 12:10). It is confirmed by the testimony of Hosea (2:8, 13, 17; 11:2; 13:1) and of Jeremiah (2:8, 23; 7:9; 9:14; etc.). Gradually, however, Yahweh triumphed over the *bē'ālīm* by appropriating for himself their titles, their sanctuaries, and their ritual. The pre-prophetic literature shows clearly that the ancient holy places of Canaan were now regarded as dwelling-places of Yahweh, whither the Israelites resorted "to seek his face" and to offer sacrifices. Many of these holy places are indicated by the facts that their names are compounded with the names or titles of ancient Semitic deities; or are the scenes of particular divine activities, such as theophanies or oracles; or are called by names that show that they are sanctuaries; or are the residences of holy persons, such as priests and prophets; or are the loci of sacred transactions such as dancing, sacrifice, and festivals. Other holy places are indicated by their connection with remarkable physical phenomena. Here belong:—

1. *Springs*.—The following springs mentioned in the Old Testament are nearly all in one way or another known to have been sanctuaries:—'Ain, "Spring," (1) Nu 34:11, (2) Jos 21:16— Anah, Gn 36:24— Aphek, "Water-course," (1) 1S 29:1, (2) Ju 1:31, (3) Jos 13:4, (4) 1S 4:1— Arnon, Nu 21:28— Ba'alath-beer, "Mistress of the well," Jos 19:8— Ba'al-Hamon, "Owner of torrent," Ca 8:11— Ba'al-perazim, "Owner of outflow," 2S 5:20—Beer, "Well," (1) Nu 21:16-18a, (2) Ju 9:21—

Beer-elim, "Well of gods," Is 15:8— Beer-lahai-roi, Gn 16:7, 13, 14— Beer-Sheba, "Well of Seven," Gn 21:28-33; 26:23, 24a, 25b, 32, 33 etc.— Berothah, "Wells," Ez 47:16— Bethlehem, 2S 23:14-16— Bur-Zelem, "Well of Darkness," Amar. 71:64, 67— Eden, Gn 2:6, 10-14— Elim, "Gods," Ex 15:27a; Nu 33:9a, 10— 'Enaim, "Two springs," Gn 38:14, 21— 'Enam, "Spring," Jos 15:34— 'En-dor, "Spring of dwelling," 1S 28:7— 'En-eglaim, "Spring of two calves," Ez 47:10— 'En-gannim, "Spring of gardens," Jos 21:29— 'En-gedi, "Spring of kid," Jos 15:62— 'En-haddah, "Spring of joy," Jos 19:21— 'En-hakkore, "Spring of quail," Ju 15:19— 'En-harod, "Spring of trembling," Ju 7:1— 'En-hattanin, "Spring of dragon," Ne 2:13— 'En-hazor, "Spring of enclosure," Jos 19:37— 'En-mishpat, "Spring of judgment," Gn 14:7— 'En-Rimmon, "Spring of Thunderer," Ne 11:29— 'En-rogel, 1K 1:9— 'En-Shemesh, "Spring of Sun," Jos 15:7— 'En-tappuah, "Spring of apple," Jos 17:7— 'Esek, Gn 26:20— Ga'ash, "Quaking," 2S 23:30— Giah, 2S 2:24— Gibe'on, 2S 2:13— Gihon, "Gusher," 1K 1:33, 38, 45— Bethesda, John 5:2-7— Hammath, "Hot spring," Jos 19:35— Hammon, "Hot spring," (1) Jos 19:28, (2) 1C 6:76— Hammoth-dor, "Hot springs of dwelling," Jos 21:32— Hazar-'enan, "Enclosure of spring," Nu 34:9— Jabbok, Gn 32:22— Jericho, 2K 2:19-22— Jezreel, 1S 29:1— Jordan, Jos 3:15-17; 2K 5:10— Lehi (see 'En-hakkore)— Marah, Ex 15:23— Massah, (J) Ex 17:7a, 7c; (E) Dt 33:7a—Megiddo, Ju 5:19—Menephtoah, Jos 15:9; 18:15— Meribah, (E) Ex 17:6, 7b; Dt 33:8b— Moab, 2K 3:16 ff.— Nahalal, "Watering-place," Jos 21:35— Rabbah, 2S 12:27— Rehoboth, Gn 26:22— Shiloah, Is 8:6— Siloam, John 9:7— Sitnah, Gn 26:21.

2. *Trees*.—Holy trees in connection with sanctuaries are also frequently mentioned. They are as follows:—Abel-shittim, "Meadow of acacias," Nu 25:1, 3a; Mi 6:5— Allon-bachuth, "Holy tree of weeping," Gn 35:8— 'Aro'er, "Juniper," (1) Nu 32:34, (2) Ju 11:33, (3) 1S 30:28— Atad, "Buckthorn," Gn 50:11— Ba'al-tamar, "Owner of palm-tree," Ju 20:33— Beer-Sheba, Gn 21:33a— Beten, "Pistachio," Jos 19:25— Beth-shittah, "House of acacia," Ju 7:22— Beth-tappuah, "House of apple," Jos 15:53— Betonim, "Pistachios," Jos 13:26— Deborah's Palm, Ju 4:5a— Eden, Gn 2:8a, 9b, 15-17; 3:1b-3, 7, 11-13; 13:10a, 10c— Elah, "Holy tree," 1S 17:2, 19; 21:9— Elim, Ex 15:27; Nu 33:9, 10— Elon, "Holy tree," Jos 19:43— 'En-gannim, "Spring of gardens," Jos 21:29— 'En-tappuah, "Spring of apple," Jos 17:7— Gibe'ah, 1S 22:6b— Gimzo, "Sycamore," 2C 28:18— Hazazon-tamar, " ? of the palm," Gn 14:7— Jabesh, 1S 31:13b— Jericho, Ju 1:16— Jerusalem, 1K 6:29, 32, 35; 7:36—

Kirjath-je'arim, "Town of forests," Jos 15:9— Lebanon, Ju 9:15— Luz, "Almond-tree," Gn 28:19— Marah, Ex 15:25a— Mamre, Gn 13:18a; 14:13; 18:1— Me'onenim, "Diviners," Ju 9:37b— Migron, 1S 14:2— 'Ophrah, Ju 6:11— Sinai, Ex 3:2c, 3, 4b— Shechem, Gn 12:6a; 35:4; Ju 9:6— Ta'anath-shiloh, "Fig-tree of quiet," Jos 16:6— Tabor, 1S 10:3— Tamar, "Palm," Ex 47:19; 48:28— Tappuah, "Apple," (1) Jos 12:17; (2) Jos 16:8— Zaananim, Ju 4:11b— In general—(D) Dt 12:12; 1K 14:23e; 2K 16:4e; 17:10d.

3. *Mountains*.—The most conspicuous of the Hebrew holy mountains was Sinai-Horeb—(J) Ex 3:5b; 19:11b, 18a, 20a; 33:3b; 33:12a; Nu 10:33a; Ju 5:4a, 5b— (E) Ex 3:1b, 12b; 4:27; 18:5; 19:2b, 3a, 17; 24:13; 33:6; Dt 33:2a— (R) Ex 19:3b, 4b— (Pr) 1K 19:8b, 11a, 15a— (P) Ex 31:18a; 34:32b; Lv 7:38; 25:1; 26:46; 27:34; Nu 3:1; 28:6b.

Other holy mountains that are known to us are:—Carmel, 1K 18:20— Dor, Jos 11:2— 'Ebal, Dt 11:29; 27:4, 13; Jos 8:30, 33— 'Ephron, Jos 15:9— 'Etam, Ju 15:8, 11— Ga'ash, Jos 24:30— Geba', Jos 21:17— Gerizim, Dt 11:29; 27:12; Jos 8:33; John 4:20— Gibbethon, Jos 21:23— Gibe'ah, 1S 10:5— Gibe'ath-moreh, Ju 7:1— Gibe'on, Jos 10:10— Gile'ad, Gn 31:25— Gilgal, Jos 5:3— Har-el, "Mount of a god," Thut. 81— Heres, (1) Ju 1:35, (2) Ju 8:13— Hor, Nu 20:23 etc.— Issachar, Dt 33:19— Kadesh, Ex 17:9— Kirjath-je'arim, 1S 7:1— Lebanon, Ju 9:15— Mizpah, (1) Gn 31:49, (2) Ju 10:17; 11:11, 34, (3) Jos 11:3, (4) Ju 20:1 etc.— Moreh, Ju 7:1— Moriah, Gn 22:2, 3b, 4, 14— Nebo, Nu 33:47— Mt. of Olives, 2S 15:32; 1K 11:7— Pe'or, Nu 23:28— Phinehas, Jos 24:33— Pirathon, Ju 12:15— Pisgah, Nu 23:14; Dt 3:27— Ramah, 1S 7:17; 8:4; 19:18-23; 20:1— Ramoth, Dt 4:43; Jos 21:38; 1C 6:73— Rimmon, Ju 20:45 etc.— Shechem, Gn 12:6 etc.— Tabor, Ju 4:6; Ho 5:1— Zalmon, (1) Ju 9:48, (2) Ps 68:14— Zion, 2S 28:18-25— Mountains in general—(D) Dt 12:2b; 1K 14:23d; 2K 16:4b; 17:10e.

4. *Caves*.—The following cave-sanctuaries are mentioned in the Old Testament:—Beth-horon, Jos 10:10— 'Etam, Ju 15:8, 11— Ma'areth, "Cave," Jos 15:59— Machpelah, Gn 23:9 etc.— Makkedah, Jos 10:16-18, 27— Me'arah, "Cave," Jos 13:4— Pe'or, "Chasm," Nu 23:28— Pisgah, "Cleft," Nu 23:14 etc.— Sinai, (J) Ex 33:22; (Pr) 1K 19:9a, 13b.

5. *Graves*.—Graves as holy places are attested at the following places:— Abel-Mizraim, (J) Gn 50:11— Aijalon, (J) Ju 12:12— Achor, (J) Jos 7:26— Allon-bachuth, (E) Gn 35:8— Atad, (J) Gn 50:11— Bethlehem, (J) Ju 12:10— Ephrath, (J) Gn 35:19; (P) Gn 48:7— Ga'ash, (E) Jos 24:30— Hebron, (P) Gn 23:19— Hor, (P) Dt 32:50—

Kadesh, (E) Nu 20:1— Machpelah, (P) Gn 23:3-20— Makedah, (J) Jos 10:16-18, 27— Melek, "king," (J) 2S 18:18— Oboth, "ghosts," (P) Nu 21:10, 11; 33:43, 44— Nebo, (P) Nu 33:47— Phinehas, (E) Jos 24:33— Ophrah, (J) Ju 8:32— Pirathon, (J) Ju 12:15— Pishgah, (D) Dt 3:27— Rabbah, (D) Dt 3:11— Ramah, (J) 1S 25:1— Rephaim, "ghosts," (P) Jos 15:8— Shamir, (J) Ju 10:1— Shechem, (E) Jos 24:32— Zorah, (J) Ju 16:31.

6. *Holy Stones*.—At all the sanctuaries which have just been enumerated pillars of unhewn stone were set up which served to focus the holiness of the spot. In these Yahweh dwelt more intensely than in the surrounding high place, and upon these the blood of the sacrifice was poured out. The following *massēbhōth*, or sacred stones, are mentioned in preprophetic literature:—Achor, Jos 7:26a— 'Ai, Jos 8:29b— Beth-el; (E) Gn 28:11, 17, 18a, 22a; 31:13a; (J) Gn 35:14a— Beth-gilgal, "House of stone-circle," Ne 12:29— Beth-Shemesh, 1S 6:14a, 15a— Beth-zur, "House of rock," Jos 15:58— Bohan, Jos 15:6; 18:17— Carmel, 1S 15:12— Ebal, Dt 27:4; Jos 8:32— Eben-'ezer, "Stone of help," 1S 4:1; 5:1; 7:12— 'Ezel, 1S 20:19— Geliloth, "Stone-circles," Jos 18:17; 22:10a— Gezer (excavation)— Gibe'on, 1S 20:8a— Gile'ad, (J) Gn 31:46, 48-50; (E) Gn 31:45, 47, 51, 52— Gilgal, "Stone-circle," (1) Jos 4:1-6, 20, (2) Jos 15:7, (3) 2K 2:1; 4:38, (4) Dt 11:30, (5) Jos 12:23— Jekabze-el, "A god gathers," Ne 11:25— Jerusalem (the sacred rock)— Kabze-el, "A god has gathered," Jos 15:21— Kadesh, Ex 17:6; Nu 20:8c, 10, 11— Kibzaim, "Two heaps," Jos 21:22— Makedah, Jos 10:16-18, 27— Megiddo (excavation)— Melek, 2S 18:18— Mizpah, Gn 31:45-52— Shechem, Gn 33:20; Jos 24:26b, 27; Ju 9:6b— Taanach (excavation)— Tyre, "Rock,"— Zoheloth, 1K 1:9a— In general—(J) Gn 49:24b— Ho 3:4; 10:1, 2; Mi 5:13; Is 19:19— (D) Dt 16:22; 27:2a, 4a; 1K 14:23b; 2K 17:10a; 18:4b— Je 2:27; 3:9; 43:13— (H) Lv 26:1c

The prophets from Amos onward set themselves against the worship of Yahweh in the high places, which they condemned as no better than a cult of the *lē'ālīm*. The movement reached its culmination in Deuteronomy, which commanded a destruction of the high places, sacred trees, and sacred stones. This was attempted in the reformation of King Josiah, but little was accomplished. Jeremiah declared that the gods of Judah were as numerous as her cities, and that she worshiped the *bē'ālīm* "upon every high hill and under every green tree."

The orthodox Jews that returned from Babylon abhorred the high places, but the common people that had been left in the land by Nebuchadrezzar and the alien tribes that moved in at the time of the exile continued to worship them. In the time of Christ these shrines received a status in

official Judaism by being regarded as the tombs of ancient heroes and prophets (Matt. 23: 29). In Christian times the old rites in the high places were still kept up by the peasantry.

Theoretically Muhammadanism is uncompromisingly monotheistic, but practically it has been unable to eradicate the high places. Springs, trees, mountain-tops, caves, and tombs in all parts of Palestine are still regarded as holy, and are tolerated by the orthodox by means of the theory that they are the burial-places of Muslim saints. These *awliyā* (plural of *wālī*, "protector, helper") are only the thinly disguised *bē'ālīm* of an earlier day. Their names are constantly changing, but the sanctity of their shrines remains the same.

During the summer of 1903 the writer of this article made an extended trip in company with the late Professor Samuel Ives Curtiss of Chicago and Professor Stuart Crawford of Beirut through the rural districts of Syria and Palestine, on which we had the opportunity to observe a number of survivals of primitive religion that had not hitherto been recorded. Dr. Curtiss was much interested in this line of research and had made several previous trips to Palestine to gather materials for his book "Primitive Semitic Religion of Today." Professor Crawford was an authority on comparative religion, and had the additional advantage of having been born in the country and of speaking Arabic like a native. He kindly served as interpreter, and asked questions for us, since neither Professor Curtiss nor I had sufficient command of Arabic to be able to undertake this task. We were always careful not to ask leading questions, but tried merely to get the people to tell us what they knew about the local shrines. Women usually proved to be our best informants, as men often suppressed the facts in the interest of theological orthodoxy, but even men told often as plain and unvarnished tales as did the women. We started in at Damascus and worked our way southward along the east side of Mount Hermon, visiting every place noted on the Great Map of the Palestine Exploration Fund that indicated by its name of Sheikh, Nebī, Sitti, etc., that it might be a sanctuary. We accumulated a large mass of notes in regard to local beliefs and religious customs. Dr. Curtiss's lamented death occurred the next summer after he had made a similar tour of exploration through Palestine. He never published the results of either of these trips, so that the present writer feels free to report some of the observations that we made at that time. These are supplemented from notes made on other later expeditions.

1. *Holy Springs*.—At Afkā, at the source of the Adonis river (the modern Nahr Ibrāhīm) there are ruins of the temple of Astarte described in Lucian's *Dea Syria*. Beneath this flows a spring that is still regarded as sacred by the natives. An ancient fig-tree that overshadows it is covered

with the little strips of cloth that are an unfailing sign of a holy tree. Inquiry elicited the information that this spring was the abode of Sa'idat Afkā, i. e. a feminine spirit of the same name as the place. Her husband built this temple. He was killed by a wild beast, and she searched among the mountains until she found his mangled body. This is evidently a modified form of the ancient myth of Astarte and Adonis. To this saint vows are made both by Metāwilehs and Christians, and sick people are brought to be cured by lying beside the water.



Fig. 1. Sacred Spring at Afkā.

At Kaṭanā about half a day's journey south of Damascus, is a copious spring known as 'Ain es-Sultān. It also is the abode of a female saint. To her the Christians, Muhammadans and Druses make vows of wheat, which they bring and cast into the spring, saying, "Oh Allah, 'Ain es-Sultān, wilt thou accept this sacrifice?" The wheat thus cast in no one dares to remove. Sheep and goats are also slain beside the spring, and are eaten there in a sacrificial meal. This saint is particularly famous as a curer of fevers.

At the point where the Jordan issues from a cave in the foothills of Hermon there was an ancient sanctuary of the Canaanites and of the Hebrews known as Ba'al-Gad. In Greek times this Ba'al was identified with Pan, and the place was called Paneas, the modern Bāniyās. This



Fig. 2. Shrine of Khadîr at Bāniyās.

shrine now belongs to the mysterious Muhammadan saint Khadîr, who is probably a transformation of an ancient Semitic divinity. To it the sick are brought, that by sleeping in it they may be healed of their diseases. Animal sacrifices are also offered, and the blood is smeared about the door, or henna is used as a ritual substitute if no victim is slain.



Fig. 3. Sick Man at Shrine of Khadîr.



Fig. 4. Blood Marks at Door of Shrine.

2. *Holy Trees*.—The grove known as the Cedars of Lebanon owes its preservation to the fact that it is sacred. A Maronite chapel stands in its midst, and religious festivals are celebrated there every year.

Near the Crusading castle known as *Qal'at es-Subeibeh* there is a grove of ancient oak trees. Beneath this is the grave of Sheikh 'Othmān, but the natives declare that this was constructed only a few years ago. Evidently the trees are the original sacred object, and the tomb is a recent addition in the interest of orthodoxy. At this sanctuary all the sects worship. There is a spring-festival about Easter-time, when the people of the neighborhood come in procession and sacrifice a lamb, and an autumnal festival at the time of harvest. Those who are sick make vows to the saint saying, "Oh Lord, there is a vow upon me; if I get well, I will bring a sacrifice to Sheikh 'Othmān." A Muslim serves as priest, and receives as his perquisites the skins of the sacrificed animals.

At *Bāniyās*, near the source of the Jordan, there is an ancient holy oak sacred to Sheikh *Ibrāhīm*. It is covered with bits of cloth hung upon it by pilgrims as calling cards to remind the saint of their requests. It is visited by members of all the sects. Those who have fevers or other diseases come to the tree and say, "We are sick, wilt thou heal us?" They vow a sheep or a yard of cloth. If they are cured, they kill the sheep at the foot of the



Fig. 5. Grove and Tomb of Sheikh 'Othmān.

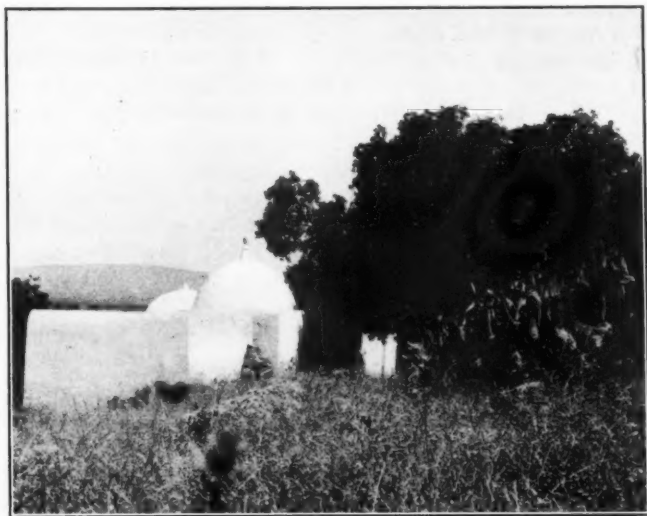


Fig. 6. Holy Tree and Shrine of Nebi Yehudah.

tree and pour the blood upon the ground, or make the cloth into a banner and hang it up in the ancient tomb. This sanctuary is in charge of a woman, who has inherited the office from her forefathers and who receives the skin, the right shoulder, and the stomach of victims. She heals the sick by placing her hands or her feet upon them. If a man is suspected of theft, he is brought here to swear; and if he perjures himself, the saint will punish him with disease or death.

Nebī Yehūdah, or "the Prophet Judah," south of Bāniyās is another holy tree that has been rendered theologically inoffensive by being regarded as the burial-place of the patriarch Judah. This is visited both by Christians and Muhammedans. Sheep are sacrificed, and offerings are made of bread and of oil from the fat tails of sheep. The priesthood of the shrine is hereditary, and it receives half of the offerings. Pilgrimage feasts are celebrated in the spring and in the autumn, and on these occasions there are sacred dances in the court of the sanctuary. The first milk of the flocks and the first fruits of the harvest are presented to the saint. Sick persons are brought to the spot, and they pray, "Oh Nebī Yehūdah, have mercy upon this man!" Then a sheep is killed, part of the blood is put upon the sufferer and part upon the posts of the door, and the rest is poured out on the ground.

At Tell el-Kāḍī, the Biblical Dan, one of the most ancient high places of Canaan, there is a holy tree standing by a copious spring that is one of the main sources of the River Jordan. This is now regarded as the burial-place of a certain Sheikh Zreik. No one dares to gather wood under this tree. A man once put a stick from it on a camel and the camel died. The water of the spring they say is "sacred from the time of Abraham, the friend of God." Barren women bathe in it and become pregnant. Sick people drink of it and are cured. The natives say that the region is inhabited by spirits, and do not dare to visit it at night.

At Nebī Yūsha' in Galilee there is a holy oak, before which stands a shrine that is regarded as the burial-place of Joshua the son of Nun. To this all the sects come, except the Druses. Nebī Yūsha', they say, is with God. At the same time he is alive in this spot. Prayers and sacrifices are offered directly to him. Two annual feasts are celebrated. The priestly family in charge of the sanctuary receives the skin and a shoulder of the victims.

Abu Balūṭa, or "Father of the Oak," is a solitary holy tree half-way between the Jordan and Irbid in ancient Gilead. It is covered with bits of rags that have been hung upon it by pilgrims. There is no tomb or shrine of any sort near it, but sacrifices are killed there, and the blood is smeared upon the trunk of the tree. While the present writer was sitting

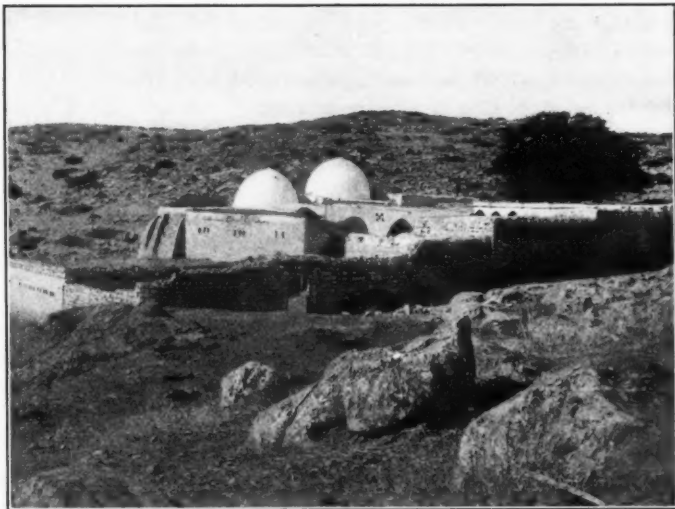


Fig. 7. Tree and Shrine of Nebi Yūsha'.

beneath it, a woman brought a boy with a diseased foot "to obtain a blessing" and to make a vow for his recovery.

Near Jifna in Judaea is a sacred oak called Um Barakāt, "Mother of Blessings." No one dares to gather wood under it, and money and valu-



Fig. 8. Heaps of Stones in Sight of Shrine.

ables are deposited for safe-keeping in its hollow trunk, because it is believed that the tree will kill anyone who steals from it.

3. *Mountain-tops.*—The majority of the alleged tombs of saints in modern Palestine are situated on the summits of high hills, and their white-washed domes can be seen from a great distance. When travellers first get sight of one they erect a little heap of stones and say a prayer.

The shrine of Sheikh 'Abdullāh, about a day's journey south of Damascus, is situated on a high hill. The structure of three-pronged magic sticks behind this tomb looks as if it might be a survival of the ancient



Fig. 9. Shrine of Sheikh 'Abdullāh.

Ashera. At the time when the writer of this article visited this place cholera was raging in the district. A certain man dreamed that the saint appeared to him with a spear in his hand, and promised to drive away the disease, if the people would bring him an offering. Accordingly a procession of three or four hundred persons, Christians, Muhammadans, and Druses, came with drums and cymbals to the high place bringing a sheep for sacrifice. It was slaughtered by the custodian of the shrine, whose office is hereditary, with the formula "Unto the face of God, and a reward to the holy saint." A sheaf of wheat from every threshing-floor is presented to this saint, as in ancient times it was presented to the local ba'al. At great festivals dervishes come who eat fire, thrust spikes through their

cheeks, and cut themselves with knives till the blood flows, after the manner of the priests of the Tyrian ba'al on Mount Carmel.

On the summit of Jebel Dāhī, or Little Hermon, south of Nazareth, there is a shrine known as Nebī eḏ-Dāhī, to which Muslims and Christians alike come to make and to pay vows. Dāhī, according to the custodian of the shrine, was one of the companions of the Prophet. Like Khadīr and Christ, he is "alive." "We fear God," he said, "but we fear the Wālī also, because he is near." He appears to men in dreams, telling them what sort of sacrifice he requires to cure them of their diseases. When they



Fig. 10. Shrine of Nebī Dāhī on Little Hermon.

slaughter an animal, they put part of the blood on the offerer and part on the door of the shrine.

4. *Caves*.—South of Kadesh Naphtali on a hill-top is a sacred cave that is now regarded as the burial-place of Nebī 'Alī el-Harrāwī. His specialty is the curing of fevers; but as the custodian of his grave, a woman, suffers greatly from the ague, his shrine has of late fallen into disrepute. The supposed tomb of the saint is a rough modern structure that is evidently a late addition to the cave.

5. *Tombs*.—The great majority of the shrines of modern Palestine are the real or assumed tombs of Jewish, Christian or Muhammadan saints.

Only as such have they been able to maintain themselves, the cult of saints being tolerated by all these religions. Wherever one finds a place-name beginning with Nebī, "prophet," Sheikh, "chief"; Mar, "saint"; Sitt, "lady," one may be sure that one will see there a little whitewashed dome that covers the supposed remains of a saint. A hundred or more such shrines are recorded on the Great Map of the Palestine Exploration Fund; and there are many others, particularly in the larger towns, whose names are not set down on this map.



Fig. 11. Hajar en-Nasārā.

6. *Holy stones*.—A number of ancient stones still survive east of the Jordan, but west of the Jordan most of them have disappeared, thanks to the iconoclastic zeal of Judaism and Muhammadanism. Nebī eḍ-Ḍāhī is noteworthy as being one of the few high places east of the Jordan where the *maṣṣebhā*, or holy stone, has survived. This stands a few feet below the top of the mountain, in front of the tomb. The Muhammadans regard it as a sort of idol and will have nothing to do with it, but it is greatly revered by the Christians, and therefore is known as Hajar en-Nasārā, "the stone of the Christians." The Christians make vows here, and offer sacrifices which they divide up raw and distribute among the worshipers.

These are a few specimens of the survival of primitive holy places in

Palestine. A great fund of similar material in all parts of the land still awaits the patient investigator. It is to be hoped that the American School of Oriental Research may gather some of this material before the spread of Western civilization shall obliterate the tradition. At many places in modern Palestine all the rites of the primitive sanctuaries of Canaan are still kept up. In spite of the century-long opposition of official Judaism, Christianity and Muhammadanism, one may still say with the author of the Book of Kings, "Nevertheless the high places are not taken away, the people still sacrifice and burn incense in the high places."

GLEANINGS IN ARCHAEOLOGY AND EPIGRAPHY.

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1. *Cup-Markings near Beit Ta'āmir.*

About a quarter of a mile northwest of the village of Beit Ta'āmir and six and one-half miles south of Jerusalem, near the edge of a field that is bounded on three sides by a rocky ridge, there stands a small stone with cup-markings that are quite certain to arrest the attention of the passer-by. The stone has the form of an irregular parallelogram, with its longer sides



Fig. 1.

running almost exactly north and south. Its greatest length is about 50 inches and its maximum width 46 inches. On three sides it rises above the ground to a height of $8\frac{1}{2}$ inches, while on its fourth or eastern side the elevation is 12 inches. The stone is firmly fixed in the soil and some little digging would be necessary in order to determine its exact relation to the bed rock. There is no evidence that it has been worked or shaped except upon its upper surface, and even here its primitive condition has been left in considerable measure undisturbed.

Among the markings upon the crown of the rock, mention may first be made of a large hollow of irregular shape which may be due in part, if not altogether, to natural causes (see the illustration). It is at present

too badly weathered to permit a certain decision on this point. The greatest width of the depression is 23 inches; its average length may be said to be about the same, and its depth is about $3\frac{1}{2}$ inches. The rough rim by which it is bounded varies from 4 to 12 inches in width. The irregularities of the stone are throughout so great that only approximate measurements can be given.

The largest of the cup-markings is in a little promontory-like elevation that juts out from the southern side into the central hollow above described. This elevated section is only slightly lower than the surrounding rim, from which it is separated by a channel-like depression, which may be entirely natural. The cup, like numberless others in Palestine, is so regular in shape as to suggest that it was ground out by a revolving stone, or at least that it was finished in this manner. Its diameter is $5\frac{1}{2}$ inches and its depth $3\frac{1}{4}$ inches. Down in the floor of the depression, on either side of this most conspicuous cup, there is a smaller cup, the one toward the west being 3 inches in diameter and $1\frac{3}{4}$ inches deep, while the one toward the east is very shallow and $2\frac{1}{2}$ inches in diameter. Beyond this last named cup, out in the eastern rim of the rock, there is another cup which is the second largest on the stone. It is somewhat more than $3\frac{3}{4}$ inches in diameter and $1\frac{3}{4}$ in depth. By the side of this cup, close to the outer eastern edge of the rock, there is an irregular, shallow cavity from $2\frac{1}{2}$ to 3 inches wide which is quite possibly a natural formation.

All the remaining cups are found in the floor of the large central hollow. Four of them are connected by a channel and are ranged in a small arc at the northeastern corner of the stone, while the fifth stands out a little in advance in the floor, and is unconnected with the cups behind. The two outermost of the series in the last mentioned group are broader and deeper than those adjacent. In this instance the diameter is about $3\frac{1}{2}$ inches and the depth 2 inches, while the two inner cups are hardly more than little saucers $2\frac{1}{4}$ to $2\frac{1}{2}$ inches in diameter. The cup standing out before the line is about 1 inch deep and 3 inches in diameter. There are thus seven cups in the floor of the central hollow and two, or possibly three, at a higher level, making nine or ten in all.

That this stone has in a general way a striking resemblance to other cup-markings in Palestine, as well as in other countries, is apparent. What is affirmed to be true of cup and ring-markings in general holds here, in that we have a central or principal cup about which other, secondary cups are grouped. The circular or spiral principle of arrangement which appears very often elsewhere seems to be largely absent in this case. In seeking to find a date and explanation for this stone it is certain that one ought not to go too far afield. Analogous phenomena in remote lands are not sure to be particularly valuable for Palestine. The needs and impulses of

primitive man in different parts of the world were not probably lacking in variety. Again it is doubtless true that within Palestine itself one should be duly admonished by archaeologists like Macalister, Vincent and especially Dalman (*Palästina-jahrbuch*, 1908, pp. 23-53) not to assign a religious or magical significance to stones that can be satisfactorily explained from some other point of view.

In the present instance, however, it is not easy to fix upon any practical use for such a group of cup-markings. They are hardly adapted to collect rain water or to be used as containers for water for domestic animals.



Fig. 2.

There are cisterns with much larger cups in the neighborhood, but none in the immediate vicinity of this stone.

Several rods to the north is a large square vat cut in the ledge that may have belonged to a wine or olive press. Diminutive cup-markings are not infrequently found associated with such ancient wine and olive presses. Possibly they were used to contain small portions of liquid or may have served as rests for pointed jars. The present stone, besides being too remote from the press, is obviously lacking in adaptation to any of these requirements.

Elsewhere in Palestine cup-markings large and small are found in or near burial caves, tombs and, in a few instances, on the floors or covering slabs of dolmens. Here at Beit Ta'āmīr the nearest rock-cut tombs are five minutes distant and thus not near enough to be at all suggestive for the understanding of this stone.

Perhaps the most significant feature regarding the situation of the stone is the fact that it stands at the edge of a field that has been very prolific in neolithic flints. Fifteen specimens were picked up by two members of our party on the occasion of a brief visit, and Mr. Herbert Clark, of Jerusalem, through whose kindness I came to a knowledge of the stone, has found more than one hundred such neolithic flints in the immediate neighborhood. Considerable numbers have been gathered by other collectors, as well (cf. *P.E.F.Q.S.*, Oct. 1913, for an account of a later visit to this spot by Professor Kellner). Whenever the native plow scratches up the surface of the ground in preparation for a new crop of millet, added specimens constantly come to light. There are likewise many fragments of pottery scattered over the field, some of them being possibly nearly as old as the flints, while others belong to much later periods. It seems not unlikely that the markings on the stone date from the epoch that produced the flints.

Such a conjecture is made probable by discoveries at Tell el-Hesi, Tell es-Safi and Gezer, where many groups of cup-markings have been brought to light through excavation. Very often they have appeared as smooth and weathered as do these under consideration, although they have been buried deep under debris for hundreds, or even thousands, of years. Some of these markings were quite certainly the work of the pre-Semitic inhabitants of Palestine. Here at Beit Ta'āmīr, along the path leading into the village and in the adjacent ledges, there are traces of caves that may well have served as the dwellings of the people of this era. Investigations in other lands have convinced Lord Avebury (*Prehistoric Times*, 1900, p. 158), as well as other scientists, that the ruder ring and cup-markings in all their variety belong to the neolithic age, or at least to the neolithic stage of culture.

To fix an early date for the stone does not of course solve the problem of its use. The work may conceivably have been prompted by some practical need or by some desire for diversion that is no longer understood. However, the arrangement and character of the depressions suggest the likelihood of a different purpose. A theory of totemic signs does not seem admissible, for it has not as yet been shown that such an interpretation of cup-markings is applicable to Syria and Palestine in any considerable degree.¹ No more is there adequate reason for regarding the depressions as Astarte symbols or emblems of a female divinity.²

¹ H. J. Dunkerfield Astley contends that the basal meaning of all primitive cup and ring-markings is everywhere social rather than religious: that they are primarily totemic signs (Hastings, *Dictionary of Religion and Ethics*, IV. p. 365). The remarkable menhir at el-Mrerat has twenty little hollows on the front and eleven on the back that are regarded by Dalman as tribal signs (*op. cit.* p. 57).

² Benzinger (*Hebräische Archäologie*, 2 aufl. p. 324) and Spoer (*Z.A.W.*, 1908, pp. 271-290) have given this theory of cup-markings far-reaching application in Palestine.

Mr. Herbert Clark, who has often visited the spot and who at different seasons has studied the stone below and the heavens above, believes that an effort has been made here to represent the planets and constellations that shine with particular brilliancy at the time when libations would naturally be poured out and festivities held for the harvest of wine and oil.

Possibly the best point of departure in seeking for an interpretation for the stone and its markings is the suggestive resemblance to later sacrificial tables and altars of libation that have been found in Egypt, North Africa and elsewhere. And even in Palestine itself there are striking parallels, as, for example, in the case of the more elaborate table cut on a much larger sacrificial stone at Šar'a.³ In this instance the table has twelve cup-marks ranging from 2½ inches to 9 inches in diameter and from 1½ to 7½ inches in depth, each of which reaches out through little loop-shaped canals to gather drainage from the upper surface of the stone. It is possible that this altar of Šar'a is the one mentioned in connection with the sacrifice of Manoah before the birth of Samson (Judges 13: 19, 20; cf. Dalman and Kittel, *op. cit.*). The question then arises, Do the cup-markings, which are not suited to a sacrifice by fire, antedate such use, as Kittel holds, or is Dalman right in regarding them as a later addition, being intended possibly to receive offerings for the dead or to serve some practical purpose?

While Dalman's wide observation and careful investigation make him an important authority in such matters, it must be granted that the hypothesis of Kittel in this instance appears extremely plausible. If his theory could be certainly substantiated, or if proof was forthcoming that the most ancient Palestinian altars were stones with cup-markings, we should have confirmation of our conjecture that the rude stone at Beit Ta'āmīr likewise possessed a sacrificial character. As it is, perhaps no more can be affirmed than that it is quite certainly a survival of the neolithic period and that it deserves careful attention as a well-attested monument of that era.

2. *Some Recently Discovered Palestinian Pyres.*

In the autumn of 1912 the small objects shown in the accompanying figures numbered 1 to 4 were offered for sale in Jerusalem. There is good reason for believing that they were found at Beit Jibrīn, but no reliable information was obtainable as to the circumstances of their discovery or

Their arguments have been met and in considerable measure disproved by Gressmann (Z.A.W., 1909, pp. 113-128), Kittel (*Studien zur hebräischen Archäologie*, p. 128 f.), and Dalman (*op. cit.* p. 51 f.). The most that can be admitted is that Astarte emblems do occur in some instances at Petra, and there may be a few cases where a like significance should be attached to cup-markings on standing stones in Palestine. That the theory can anywhere be rightfully extended to horizontal surfaces is not yet established.

³ This stone is discussed by Hānauer (P.E.F.Q.S., 1885, p. 183 ff.), Schick (Z.D.P.V., 1887, p. 131 f.), Kittel (*op. cit.* p. 107 ff.), and Dalman (*op. cit.* p. 41 ff.).

as to the purpose which they had originally served. For lack of a better description, local dealers in antiquities called them "Looking-Glasses in Plaster."

Three of the objects had the form of thin circular discs varying from $\frac{1}{4}$ to $\frac{5}{8}$ inches in thickness, the largest of which (Fig. 1) is $5\frac{5}{8}$ inches in diameter and $\frac{1}{4}$ inch in thickness. The surface of this disc is adorned



Fig. 1.

with three shallow concentric circular grooves, two near the outer edge, while a third runs round the margin of a small central depression. Faint traces of color remain to show that all these grooves were originally outlined in black, while the field between the two inner grooves was once filled in with a design of black lines and irregular, alternately red and black wedges, radiating out from the center to the circumference. The central circular depression opens out with a flaring inclination and is 2 inches in diameter. A small toolmark can be seen at the center of the disc, and in the rim there is a perforation intended presumably to receive a suspending

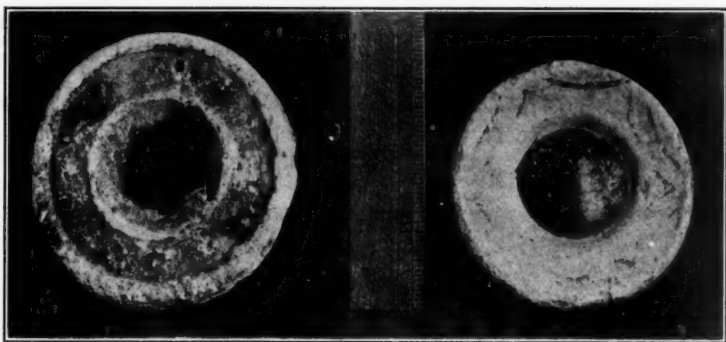


Fig. 2A.

Fig. 2B.

cord. The material is fine plaster which is somewhat chipped and marred at the edges.

No. 2A is of much coarser plaster and of cruder workmanship. It is $\frac{3}{4}$ inch in diameter and about $\frac{3}{8}$ inch in thickness. The central depression is irregular in shape, but has an approximate diameter of $1\frac{1}{4}$ inches. There is a raised margin about its outer edge as well as around the central hollow. Faint traces of a design in black lines that once adorned the face of the disc are still discernible. A broken fragment of clear glass, having the form of an irregular parallelogram and with a slight convexity like that of a watch crystal, is set in the center and is held in place by mortar at the edge. As in the case of the previous disc, there is here a small hole for suspension.

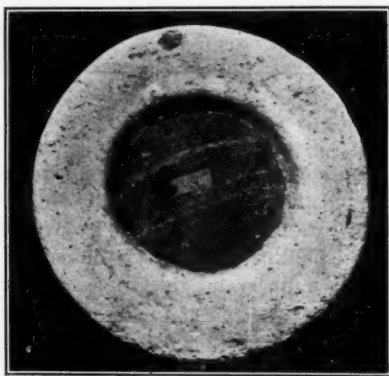


Fig. 3.

The third disc (Figs. 2B and 3) is likewise of rough plaster, but it is fashioned with somewhat greater care than the one last described. The diameter in this instance is $3\frac{1}{4}$ inches and the thickness $\frac{5}{8}$ inch. It differs further in having two finished faces (2B and 3) with central depressions that are respectively $1\frac{3}{4}$ and $1\frac{7}{8}$ inches in diameter. In each there



Fig. 4.

still remains a circular piece of thin and slightly convex glass. These small crystals, which were fitted into their present positions with considerable care, have now become markedly iridescent, and it will be noted that one is very thin and slightly broken. The remains of a design of curved black lines can be distinctly seen on one side of the disc, whereas the other is too badly worn to retain more than the barest suggestion of ornamentation. A black zigzag line, with dots in the angles, runs round the circumference.

There is no perforation in this disc, but it appears to have rested upon the face that gives most evidence of wear.

The fourth object (Fig. 4) is of an entirely different design, having the form of a thin plaster plaque, pointed at the top where there is a hole for suspension, and rounded at the bottom. The length is $10\frac{1}{2}$ inches, while the width ranges from 5 to $5\frac{1}{2}$ inches, and the thickness from $\frac{1}{4}$ to $\frac{3}{8}$ inch. The upper depression is 2 inches in diameter and $\frac{1}{4}$ inch in depth, and the lower $1\frac{3}{4}$ inches in diameter and $\frac{1}{4}$ inch in depth. That glass was once set in both these hollows is made evident by the bits of mortar still adhering to the edges. In way of ornamentation there are two crescent-like perforations, the one on the right being $2\frac{1}{2}$ inches in length and that on the left $2\frac{3}{4}$ inches. A black line once ran round the entire outer margin of

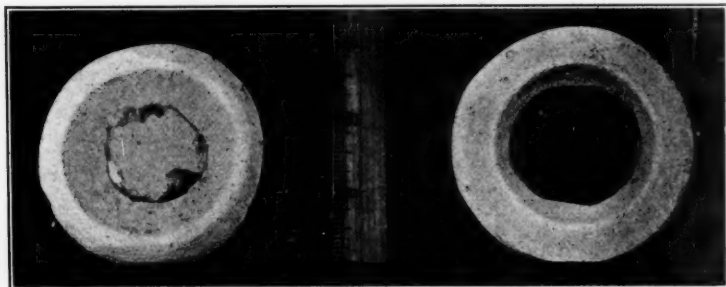


Fig. 5A.

Fig. 5B.

the plaque, and the same color was used in the decorative designs that appear in the illustration.

Two additional plaster discs (Fig. 5) came to light in Jerusalem in the spring of 1913, and are now included in the collection of Professor Max Kellner of Cambridge, Massachusetts. Nothing is known as to their provenance beyond the vague and valueless rumor that it was the Jordan valley. They are irregular in shape and are somewhat cruder in their workmanship than those previously discussed. The smaller (Fig. 5A) is $2\frac{7}{8}$ inches in diameter and its circular depression is $2\frac{1}{16}$ inches in diameter, while the larger (Fig. 5B) is $3\frac{1}{2}$ inches in diameter, and its depression $2\frac{5}{16}$ inches in diameter. Neither one has any perforation for suspension. In one instance the slightly convex glass covering the central depression has been shattered, while in the other it is still intact. The surviving glass is dark and iridescent, and this same is true of the few fragments remaining in the other disc.

In July, 1914, Professor Kellner had the good fortune to acquire fur-

ther objects in plaster that had been brought to Jerusalem by a native of Damascus, named Hadj Sufi. As usual, nothing definite could be learned as to the locality from which they came. The evasive Damascene would not commit himself beyond the declaration that they were from the Hauran, south of his native city.

At least one, and probably two, of these antiquities belong to the same category as the objects previously described. This certainly is true of the thick plaque (Fig. 6) having the form of a cock, or possibly of a dove. Decision as to the design is made somewhat uncertain by the absence of the

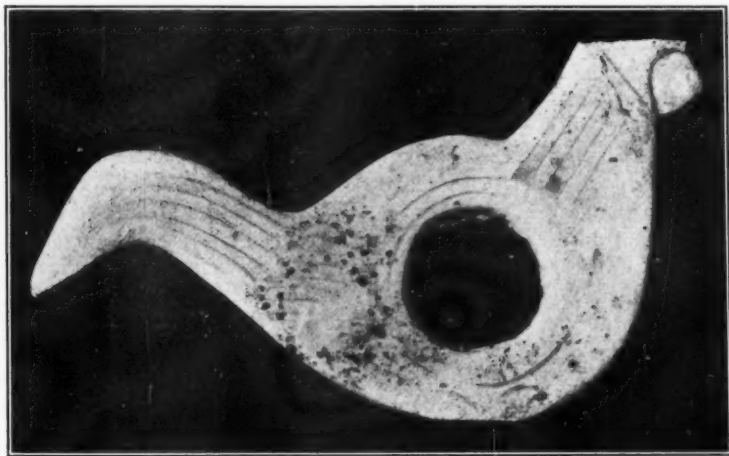


Fig. 6.

head, but the whole contour, particularly that of the crop and the tail, suggests the intention to portray a cock. The same inset of dark, iridescent, slightly convex glass, which is a constant feature of the discs, is present here. The plan of ornamentation includes black circles about the glass, stripes radiating out towards the head and tail, and zigzag lines upon the upper and lower portions of the body. The reverse side is left flat and unfinished. No provision was made for suspending this plaque.

That all the objects thus far considered were intended to serve a like purpose can hardly be doubted. The clue as to this use is afforded by a discovery made in 1893 by Père Cré, superior of the Pères Blancs and curator of the museum at the Seminary of St. Anne in Jerusalem (*Revue Biblique* III, pp. 277-291). In the spring of that year he obtained from a native a collection of thirty-five Christian lamps that were said to have

been found shortly before in the ruins of Umm Tūbā, which is distant about three miles south of Jerusalem on an old trail leading to the Shepherds' Field and Frank Mountain. It was further reported that at the same time objects of glass had been unearthed but broken in the course of excavation. On visiting the spot soon afterward Père Cré was at first unable to obtain any information regarding discoveries of particular interest; but as he was departing, a villager came running after him with an object which shows much resemblance to the cock-shaped plaque just discussed. Père Cré speaks of it as a flat piece of pottery with an outline which he ultimately decided was that of a peacock, although he had originally regarded it as a dove. Its left side is turned toward the beholder, and not the right, as is true in the case of the cock. The reverse side is unfinished. About two-thirds of the little convex glass at the center still clings to the edges of the depression. The dimensions as given by Père Cré are 24 cm. long; 16 cm. high; and 1 cm. thick. The diameter of the central depression is $5\frac{1}{2}$ cm. There are three eye-like designs, each represented by two concentric circles in relief, with a little rounded protuberance at the center. The eye in the head is very large in proportion to the breadth of the neck (it is 27 mm. in diameter, while the breadth of the neck is only 3 cm.). Those on the tail are quite probably intended to suggest the markings of a peacock; otherwise the plumage is represented by a series of zigzags in relief, converging toward the upper part of the body, where there is a small hole for suspending the pottery in a vertical position. The head is crowned with six tooth-like points which bear some resemblance to a comb, but in this instance they are doubtless intended to represent the feathered crest of a peacock.

It so happened that Père Cré's visit to Umm Tūbā fell shortly before the assembling of the Eighth Eucharistic Congress which convened in Jerusalem May 14-21, 1893. He tells us that his thoughts had been much occupied by this impending gathering, and that he had recently imagined the possibility of finding perchance a chalice of glass that ancient ecclesiastics might have used in the sacred liturgy and then carried with them to the tomb. It may have been by reason of such reflections that the thought flashed into his mind that he had found a Eucharistic dove. However, it is not unlikely that he would have been ultimately led to the same conjecture by the striking way in which this central depression, with its convex glass, resembles the lunette, or circular case of crystal, that is fitted into a monstrance for receiving and for the solemn exposition of the Sacred Host. He was aware, furthermore, of the fact that Eucharistic receptacles, having the form of a dove and suspended above the altar, were widely used at an early date. Upon investigation he learned that this custom was supposed by some to have originated in the Orient (Le Brun in Corblet II, p. 296;

cf. *Rev. Bib.*, III, p. 281). What was not clear was whether the doves that were hung at times in baptisteries and over the tombs of saints likewise contained the Eucharist. This has not been the usual view, but it is advocated by some liturgists (cf. *Rev. Bib.* III, p. 282 and the literature there cited). The circumstances of Père Cr  's discovery seem to confirm this supposition, for it is altogether likely that the pottery peacock came from a Christian tomb, perhaps the very one that yielded up the 35 lamps.

Umm T  b  , the place of discovery, is said to derive its name from Miriam   -Toub  nieh, or "Mary the Blessed," the wife of Clopas. Tradition states that at her death she was buried in the grotto that had served as her dwelling-place. In due time this tomb became a chapel, and still later a monastery was erected above and around it. This was done according to Cyril of Jerusalem by Morinus. The date would thus be fixed as the close of the third or the opening of the fourth century.

There are weighty considerations favoring P  re Cr  's conjecture as to the purpose and origin of the pottery peacock. In the first place we know that from earliest days the Eucharist was associated intimately with the hope of immortality. The Epistle of Ignatius to the Ephesians (XX, 2) calls it the medicine of immortality, the antidote preventing us from dying and causing us to live forever in Christ Jesus. Irenaeus says that our bodies when they receive the Eucharist are no longer corruptible but have the hope of resurrection to eternity (*Adv. Her.* Book IV, ch. 18, Pars. 4 and 5). We have furthermore in ecclesiastical legislation unmistakable evidence of an ancient custom of giving the Sacrament to the dead; that is, presumably, of depositing it in the mouth of the deceased. A prohibition of this practice is included in the Fourth Canon of the Council of Hippo in 393, where it is commanded that the Eucharist should not be given to dead bodies nor baptism conferred upon them (Mansi, III, 7, 19; cf. Hefele, II, 469). This decision was reaffirmed at Carthage four years later (Mansi, III, 9, 19 ff.). A like enactment is included in the African Code of 419 (Mansi, III, 7, 19; Hefele, II, 469, Canon 18). The Twelfth Canon of the Council of Auxerre in 578 (or 585) says that neither the Eucharist nor a kiss may be given to the dead (Mansi, IX, p. 913; cf. Hefele, IV, 413). Again, more than a hundred years later the Quinisext or Trullan Synod declared that no one may give the Eucharist to the bodies of the dead, for it is written "Take and eat, but the bodies of the dead can neither take nor eat" (Mansi, II, 979; cf. Hefele, V, 234. With this should be compared the like reason given by the Council of Hippo).

These enactments witness to a primitive Christian practice that was evidently widespread and persistent. In view of this testimony it will occasion little surprise that there should come to light in the Christian sepulchers of Palestine receptacles that were obviously designed for the

preservation of crumbs of the Eucharistic bread. Even though the Sacrament might not be administered to the dead, it might still, when properly enshrined, be deposited in the tomb. That this was actually done appears to be attested by a tradition recorded in the apochryphal life of St. Basil attributed to Amphilochius, but thought to have been really written as late as the ninth century. We are told that when St. Basil consecrated the Eucharist for the first time he divided the sacred host into three parts: one was suspended in a golden dove upon the altar; of one he partook with much fear and veneration; while the third fragment he reserved against the time of his death, in order that it might be placed with him in his tomb. (Unam quidem cum multo timore et veneratione sumpsit, alteram vero una secum sepeliendam servavit. *Cf. Rev. Bib.*, III: 289.) This consecration would probably take place in Caesarea of Cappadocia in 362, while St. Basil's death came seventeen years later, on January 1, 379. The evidence for the existence of the custom in question is thus convincing, whatever may be thought of the authenticity of the biographical notice.

Wherever the Eucharist was thus kept a fit receptacle must of necessity have been provided. That at Umm Tūbā it should have the form of a cock, or a peacock, is not strange when we consider the time and place. We have only to recall how widely the peacock was used as a symbol of immortality in Christian sepulchral art, and to remember at the same time the rude and humble character of most of the furnishings of the Byzantine tombs that have thus far been reported in Palestine. The cock is equally appropriate for such a purpose; for it was also employed early as an emblem of the resurrection. A case in point would be the painted tomb at Beit Jibrīn recently described in *Art and Archeology* (I, pp. 62-71). Indeed it is quite within the bounds of possibility that the major part of the objects which we are considering came from tombs belonging to the very same necropolis.

The purpose of the discs was unquestionably identical with that of the more elaborately prepared receptacles, since they have as their most conspicuous feature the central depression covered and sealed with a thin piece of convex glass. Definite proof for associating them with Christian tombs has been furnished through the publication of the account of a circular piece of pottery found at Gezer by Mr. Macalister (*The Excavation of Gezer*, 1912, I, p. 387 ff.; II, p. 455). The tomb from which it came had three arcossolia and was thus of a type common in the Byzantine period. Various objects of metal and brass, including a cross of silver and one of iron, discovered at the same time, confirm the conclusion as to the date. Unfortunately there is no record as to the position in which the disc was found. Its decoration consists of a band of chevrons in relief, united by a faint line, and it has a small hole for suspension. There is a raised collar

round a central depression in which a fragment of glass is set and held in place, as in the previous instances, by a lime composition worked in about the edges. Mr. Macalister accepts the conclusions of Père Cré and looks upon the disc as a relic of the ancient custom of depositing the Sacrament with the dead. Apparently no other object of like character was



Fig. 7.

found at Gezer, since this one is spoken of as the most remarkable of the few Christian antiquities that were yielded by that site.

It will have been noted that the glass is still intact in three of the discs. In one instance it is clear, and particles of an uncertain character can be discerned below. However, when one of the glass coverings was removed and these particles examined, no definite conclusions could be reached. Père Cré speaks of a white, powdery substance, appearing under the fragments of glass that still remained in the peacock. It is, however, doubtful,

whether any information of value would come from either chemical analysis or microscopic examination of this material. Why in two instances there should be a double receptacle is not altogether easy to explain, unless, perchance, more than one person is concerned, or crumbs were preserved from two occasions.

A new phase of the subject has been opened up by a plaster figurine now in the possession of Professor Kellner and reported to have been found along with the cock-plaque already discussed. It has the form of a thin plaque $7\frac{1}{8}$ inches high, with a maximum width of $2\frac{5}{8}$ inches. It has been broken and repaired just below the point where the hands are resting on the breast. The eyes, the hair, the sides of the face and the fingers are delineated with black lines. The stripes about the neck, as well as the one at the bottom of the figurine, are continued across the back; otherwise this reverse surface is left smooth and unfinished. The head is crowned with a roll-like head-dress and the ears are pierced. The nose and chin are moulded in relief. Upon the breast there is a raised square bordered by a black line. The intention was, evidently, to represent this shield-like object as grasped and held by the hands. Within there is an irregular depression covered by an inset of slightly convex glass. It is thus obvious that the figurine has a close relationship to the pyxes previously described.

It is the striking form in this last instance that especially arrests our attention, for thus far nothing at all comparable to it seems to have come to light. Were the evidence not so abundant and unambiguous we might hesitate to associate it in any way with Christian rites, but under the circumstances we can hardly doubt its close relationship to the Eucharistic pyxes. At the same time we can no more question that it has some intimate connection with the Astarte figurines shown on the following pages. They on their part give unmistakable evidence of their true character and ancestry. Accordingly but one inference seems possible, namely, that we have here a unique example of religious syncretism, of the survival of pagan conceptions in association with Christian practices. It thus becomes clear that the Astarte of the tomb must have been the compassionate Mother Goddess, whose help it was sought to combine with the power of the life-giving Sacrament.

3. *A Group of Palestinian Figurines.*

Along with the eucharistic cock and figurine described in the previous article, Professor Max Kellner of Cambridge, Massachusetts, has in his collection four additional plaster figurines that were supposedly found at the same time and place, namely, 1914, and in the Hauran district south of Damascus. There is, however, little in the way of circumstantial evidence to corroborate the story of discovery beyond the fact that the same peasant

had all the above mentioned antiquities in his possession and that they exhibit a striking resemblance in workmanship, in material, and to some extent in design. With the exception of the last, they all have the form of a thin plaque and must have been deposited in a recumbent position.

The figurine appearing on the right in the first illustration was reported to be a member of the Hauran group. Its likeness to the one discussed in the previous article as regards the head and the lower body is obvious. The main differences are to be found here in the outstretched arms, the emphasis of the Astarte characteristics, and the absence of the eucharistic panel. The height is 4 11-16 inches, and the breadth across the extended



Fig. 1.

arms is $2\frac{7}{8}$ inches. The lines delineating the head, eyes, and hands, as well as all other markings, are in black. A series of dots, both above and below the neckband, are doubtless intended to represent adornments of beads and precious stones. The nose, chin and breasts are moulded in relief, and the ears are pierced.

The provenance of the figurine on the left (Fig. 1) was given as the Jordan valley. However, it is manifestly of the same type as its companion. The workmanship is a bit cruder, and it is slightly taller, the height being $4\frac{3}{4}$ inches. Were the right arm still intact, the breadth would likewise be somewhat greater. The head-dress is less noticeable, while the eyes are larger and the nose, as well as the breasts, are made more prominent. In this instance likewise the ears are pierced and, as before, all

lines are in black, the band about the neck being continued across the reverse side. Faint dots and bars still remain of the original representation of a necklace.

In the second illustration we return to what we have called the Hauran group. This figurine is $7\frac{1}{8}$ inches high, and has a width of $3\frac{5}{8}$ inches across the arms and $2\frac{1}{2}$ inches at the bottom of the skirt. The head, once



Fig. 2.

broken away, has been repaired below the beaded line of the necklace. Black is again the color used for ornamentation and for outlining the features of the face and members of the body. There is a noticeable modification of the head-dress, which extends below the piercing of the ears and terminates less abruptly. While through the robe the artist has introduced a new feature into his design, he has not permitted its folds to conceal the nudity of the figure and thus obscure its maternal significance.

There is yet another figurine in Professor Kellner's collection that is

in some respects more remarkable than any of the preceding. Quite evidently she is possessed of some special distinction, for a little shrine has been prepared for her abode. Unfortunately the only information obtainable as to her history was that she was the central personage in our Hauran



Fig. 3.

group, which consisted of the eucharistic cock and figurine, together with the first and third figurines described in this present paper.

Obviously an ambitious effort has been made to fashion a figure in a sitting posture, with hands spread over the knees. When removed from her shrine (Fig. 4) the height of this divinity is $6\frac{5}{8}$ inches, and her breadth from 2 to $2\frac{1}{2}$ inches. The head, which is proportionately smaller than in the previous examples, is surmounted by a tiara-like head-dress adorned with vertical black bars, and is entirely unlike anything appearing in the

accompanying illustrations. The eyes, face, and hands are outlined in black, and about the neck there are traces of black dots representing a necklace, below which there is some manner of pectoral ornamentation made up of a series of interlaced lines and dots.



Fig. 4.

The shrine is $9\frac{3}{8}$ inches high, $3\frac{1}{2}$ inches wide and has a depth varying from $3\frac{1}{8}$ to $3\frac{3}{8}$ inches. At the apex of the bellshaped roof there is a small hole, but suspension at this point must have been hazardous for so frail a structure. The outside of the roof, as well as the exterior of the panels at the base of the shrine, were once decorated with a design of black dots that is now barely distinguishable.

The small circular depression at the foot of the figure recalls the hollows that are characteristic of the eucharistic pyxes, but in this instance there are no certain indications that glass was ever present, or that there was any intention of making use of such a crystal. One is inclined to conjecture rather that this feature results from a rude attempt to represent the extended knees of a seated figure.

The position of the figurine within the shrine, plus the unmistakable characteristics of femininity, leave no doubt that we have to do with a phase of the Astarte cult, which was as widespread in Palestine as in neighboring lands. Investigations hitherto have concerned themselves for the most part with the earlier stages of this paganistic development, but the material here presented undoubtedly belongs in one of the latest of its chapters. This is placed beyond question by the design and technique of the figurines. There is a manifest kinship between them and the eucharistic figure described in the previous article, and thus we have proof that they belong to the early centuries of the Christian era. On the other hand there is a no less certain relationship to the rude figures of earlier days that have come to light in various quarters along the Syro-Palestinian coast, particularly at Gezer.

During the excavation of this site a considerable number of small terra-cotta plaques were found upon which an undraped female figure was impressed in low relief. While the group before us gives evidence of a somewhat different ancestry, it does not differ in essential features, but bears witness to the same traditional conception. At Gezer, where Egyptian influence was strongly felt, almost without exception the figures bore traces of a Hathor prototype, whereas only in the last two of our present group is there anything that suggests the characteristic Hathor wig. The head-dress here is of another type that is not so easy to identify. The position is that of the full face, but this is likewise true, at least of the head and body, of specimens found at Gezer as well as elsewhere in Palestine. It was only in depicting the feet that the Egyptian profile perspective was sometimes followed. As regards foreign influence, our group appears to belong to the Cypriote rather than to the Egyptian or Babylonian type. In the pillar shape, the beak-like noses, and the pierced ears, we apparently have reminiscences of traits associated with Cyprus that are conspicuous in statuettes of various periods found at Ta'annak and elsewhere in Palestine (*Coutenau; La Déesse Nue Babylonienne*, p. 97 ff.). Clearly, an artist who pierces the ears without any intention of providing earrings is only perpetuating a conventional feature. That earlier models would thus be not altogether forgotten in the latest production of Astarte images, and that different parts of Palestine and Syria should be under the influence of different types, is of course to be anticipated.

That the objects before us are entirely without artistic merit and are of interest solely because of their historical and religious significance need hardly be stated. It is to be hoped that additional discoveries may soon assist in determining more satisfactorily the questions of date and provenance, and that the way will thus be opened for a fuller understanding of this interesting group of figurines.

cf. Gobat - Byzantine
Best script? V 160-162 (1896)
He thinks that the
cathedral or its crypt
may have been
called "Hippodrome".

4. A Caesarean Inscription.

Just outside the limits of the present village of Caesarea (Palestinae), to the north of the path leading eastward toward the site of Herod's Hippodrome, there was, and presumably still is, a large marble slab bearing a Greek inscription. On May 16, 1913, while camping near at hand, I removed a portion of the débris beneath which it is buried, and took the accompanying photograph (see Plate 1). Some twenty years before, a copy of the inscription had been made by Père Germer-Durand (*Revue Biblique* IV (1895) p. 75), but, singularly enough, in this instance his transcription was not altogether faithful. Soon after, on September 10, 1895, it was copied a second time by Mr. Frank T. Ellis of Bishop Gobat's School in Jerusalem. This time the work was done with essential accuracy, but Mr. Ellis' text was not followed in all details by Dr. A. S. Murray who published it with a translation, but without any attempt at explanation, in the *Quarterly Statement of the Palestine Exploration Fund* (1896, p. 87 f.). Apparently Dr. Murray was unaware of the rendering already proposed by Père Germer-Durand. Aside from these two very brief notices, neither of which is altogether accurate, I cannot find that the inscription has ever been reported or discussed.

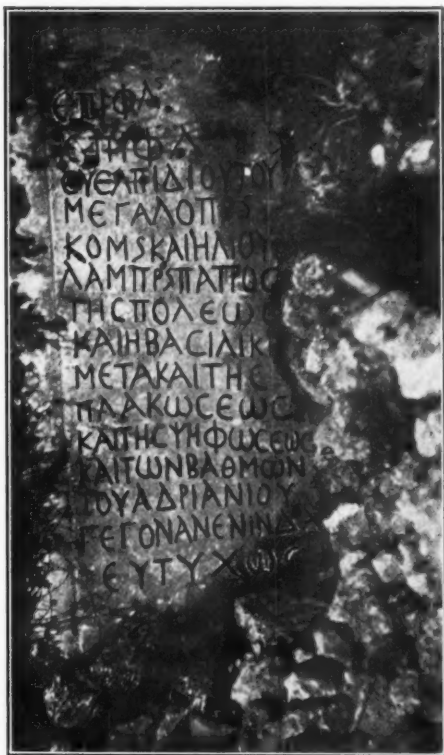
The slab upon which it is chiseled is now so weighted down with a mass of loose stones that one can not readily ascertain its exact dimensions. It is furthermore somewhat broken and irregular. The space occupied by the inscription is approximately 2 feet by 4 feet 7 inches, and the letters, which are sharply and clearly executed, are about $2\frac{1}{4}$ inches high. They can be seen with considerable distinctness in the first of the accompanying photographs, and at the same time one gains a good impression of their style and workmanship. The second cut shows the letters after they had been retouched by the photographer with India ink.

We note that the inscription has a double beginning, a point alluded to neither by Père Germer-Durand, nor by Mr. Ellis. There is a short line ending with a sign of abbreviation, and then below, at an interval somewhat greater than that separating the other lines, the same letters and mark of abbreviation are repeated in broader script (ΕΠΙΦΛΣ). Evidently the first letters were cut in imitation of those beneath at some time when the stone

was more accessible than at present, and after Père Germer-Durand and Mr. Ellis had made their copies.

The sign of abbreviation occurs five times aside from the preliminary line, namely in lines 1, 3, 4, 5, and 13; the last instance being overlooked by Mr. Ellis. The symbol here employed is one well known and widely used in Palestinian inscriptions (see *Jour. of Bib. Lit.* XXII (1903), p. 196; *P.E.F.Q.S.* 1902, p. 271). The abbreviated names and titles can be read with confidence because they are paralleled elsewhere. Dr. Murray has pointed out the particular helpfulness in this respect of an inscription from Cyprus (*C. I. Gr.* 8662). It chanced to contain four of the five words in question and uses them in the same combinations of *μεγαλοπρεπίστατος κόμης* and *λαμπρότατος πατήρ*. It also employs *πλάκωσις* in referring to work upon a gate (*πύλη*).

Our text may be read and translated as follows:



Ἐπὶ Φλ(αοῦ)ου
Ἐπὶ Φλ(αοῦ)ου
Εὐελπιδίου τοῦ
μεγαλοπρ(επεστάτου)
Κόμητος καὶ Ἡλίου
λαμπρο(τάτου) πατρὸς
τῆς πόλεως
καὶ ἡ βασιλικὴ
μετὰ καὶ τῆς
πλακώσεως
καὶ τῆς ψηφώσεως
καὶ τῶν βαθμῶν
τοῦ Ἀδριανίου
γέγοναν ἐν Ἰνδ(ικτιῶνι) ἅ
εὐτυχῶς.

"Under Flavius Euelpidius, the very magnificent Governor (or Prefect), and Elias, the most illustrious Father of the city, the basilica, together with the paving (or incrustation), and the mosaic work, and the steps of the temple of Hadrian were successfully completed in the first year of the Indiction."

Père Germer-Durand overlooked the *καί* of the fourth line, with the result that he found reference to but a single patron. He further made *μεγαλοπρ-κομ.* to be the abbreviated forms of *μεγαλοπρεσβυτέρου κομμοδου*. On the basis of this interpretation he obtained the following translation: "Sous Flavius Euelpidius, grand prêtre de Commode-Soleil, très illustre père de la cité, la basilique avec le placage, la mosaïque et les degrés de l'Hadrianée furent achevés heureusement, en l'indiction première" (*Rev. Bib.* IV, p. 76). As to what manner of institution a "Commode-Soleil" may have been, he ventures no suggestion. Should his interpretation of the abbreviations be accepted and read in the original text, there would result a manifestly improbable allusion to "The High-Priest of Commodus and the Sun."

Dr. Murray, disregarding both the text and the probabilities of the case, takes *τῆς πόλεως* with *ἡ βασιλική* and translates "the basilica of the city" instead of "Father of the city." He likewise emends *ἐν* in line 13 into *ἐν(ous)*, a most natural conjecture were there any doubt as to the original reading. The preposition *ἐν* that is actually employed is doubtless used because of the preceding *γέγοναι*, since elsewhere *ἐν ἔτει* occurs in a corresponding position after similar verbs.

The translation which we have proposed above speaks of the successful completion of a public work during the civil administration of Flavius Euelpidius, the very magnificent Governor (or Prefect) and during the ecclesiastical headship of the most illustrious Father Elias, and it is further stated that the time was the first year of some Indiction. All this is tantalizingly indefinite. Inasmuch as the date is given in terms of an Indiction the reference must, of course, be to some period subsequent to Constantine. The resemblance of the inscription to others of known date that have been found in Palestine, both as regards its style and its whole execution, suggest the late sixth or early seventh century. It might conceivably have been somewhat earlier, but could not be placed much later, in view of the Persian invasion and the Mohammedan conquest of the land.

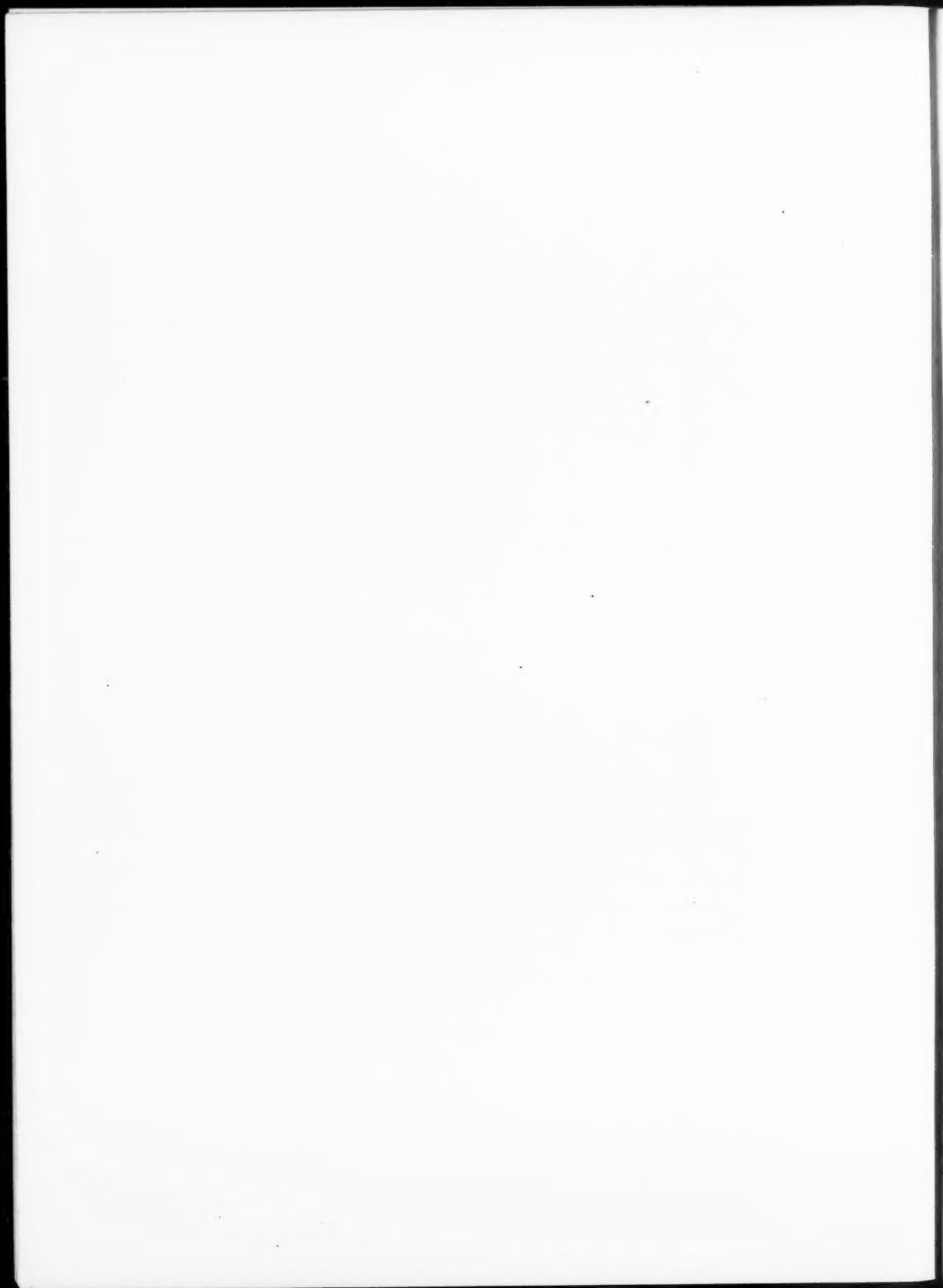
The first name affords no assistance in a nearer determination of the period, since it was not borne by any official of Caesarea thus far known to us. The second name, however, may prove more serviceable. In the year 536 a synod was held at Jerusalem, for the ratification of the ecclesiastical sentence pronounced against Anthimus of Trapezont. Appended to this enactment, which was signed by the 49 ecclesiasties present and participating, we find after the name of Peter, Bishop of Jerusalem, that of

cf. Bas. Basil. II
240-241 where
correction is made
as to καί

INSCRIPTION FROM CAESAREA



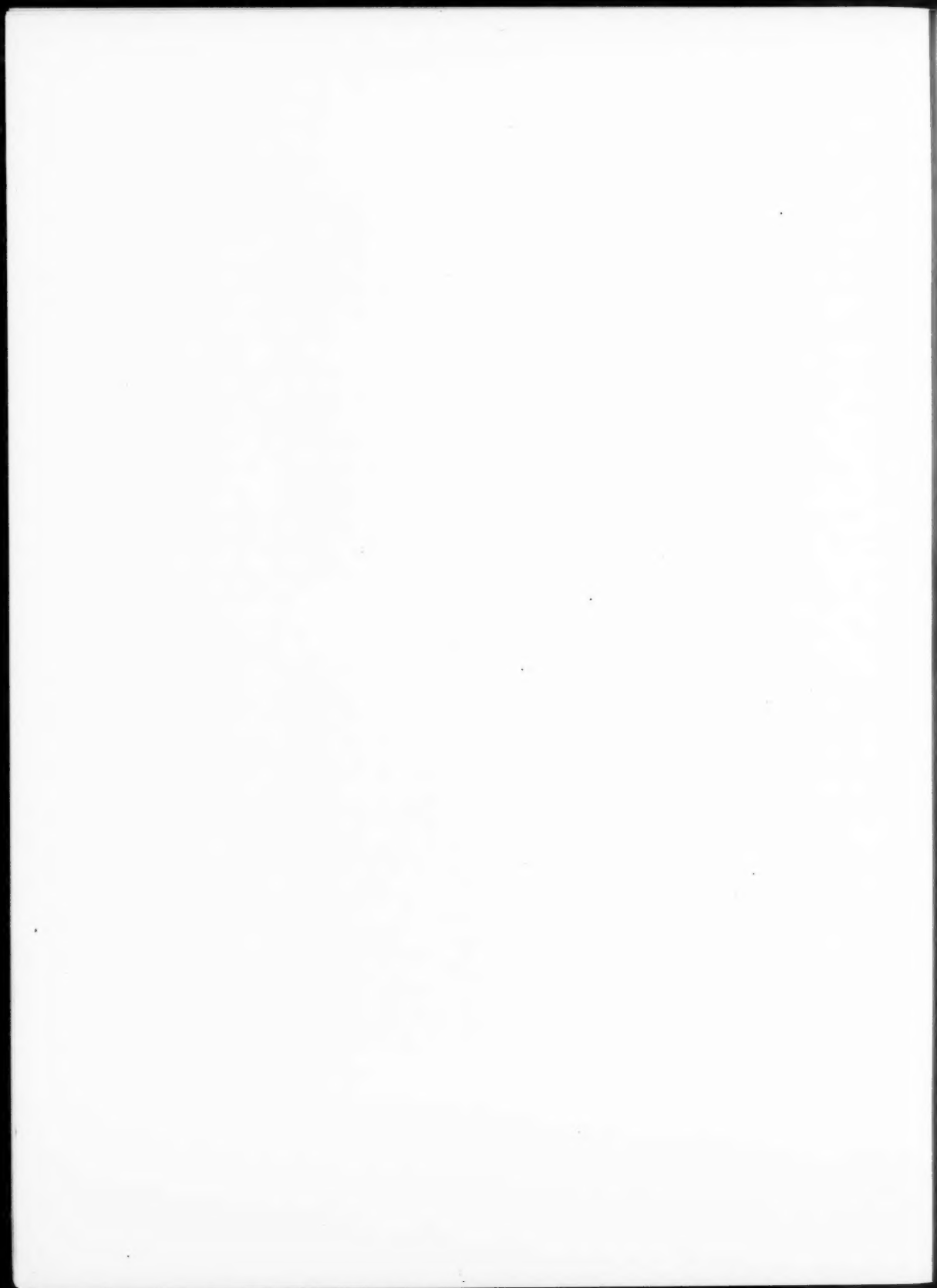
Plate 1.



NABATEAN INSCRIPTION FROM PETRA



Plate 2.



Elias, Bishop of Caesarea (Ἡλίας ἐλέω θεοῦ ἐπίσκοπος Καισαρείας. *Mansi*, VIII, p. 1172). It seems not unlikely that he may be the same official mentioned in our inscription. Either this must be the case, or he must have had a successor of kindred name who served subsequently to 553, for among the known bishops of Caesarea up to that date there is no other who has a corresponding name (Lequien, *Oriens Christianus* III, p. 531 ff.). There is a record that Elias was preceded by Joannes I, who entered upon his office in 518, and that he was followed in 541 by Sergius. Accordingly the interval of his own incumbency must fall within the period of 23 years bounded by these dates. We are told in the inscription that the work was completed in the first year of some Indiction. Between 518 and 541 there were two such years, namely 523 and 538. Undoubtedly the latter best suits all requirements in the present instance, since Bishop Joannes I continued in office sufficiently long for his influence to extend and be felt outside his own diocese, and for his writings to become known. Of Elias, on the other hand, there is no information beyond the fact that he was present at the Synod of Jerusalem in 536. If our computation be correct, the basilica in question was completed early in the reign of Justinian, and thus several years before the last great uprising of the Samaritans of Caesarea against their Christian neighbors.

It is somewhat surprising, particularly at this late period, to find the repair, or the construction, of the steps of a temple of Hadrian thus commemorated, along with the completion of a Christian church. It would appear that the Governor and the Father of the city sought to be impartial in the distribution of their official favor, unless, perchance, the repairs in question were rendered necessary by the erection of the church. In any event striking proof is thus afforded of the persistence of pagan worship at this center far down into Christian days, as well as of the diverse elements making up the population of the city. It must have still kept its Gentile character in considerable measure, notwithstanding the presence of numerous Jews, Samaritans and Christians.

Our inscription is particularly significant as being the only evidence for the existence of a temple of Hadrian at Caesarea. In all probability its erection dates from 130-131, which was the period of his sojourn in Palestine and of his last extended journey in the East. In his capacity of *Restitutor*, he would be quite certain not to overlook the virtual capital of the land. From Epiphanius we learn that there was a temple of Hadrian at Tiberias, which he understood was known as the Ἀδριανεῖον (*Haer.* 30, 12). At Caesarea it is possible that Hadrian restored and reconstructed the former Σεβαστεῖον while this in turn would doubtless be no other than the temple built by Herod. In that case Hadrian's temple stood on the low hill over against the harbor.

Our inscription seems to disprove the conjecture of Guérin (*Samarie*, II, p. 326) that when Caesarea "embraced the Christian religion" the pagan temple was destroyed to make room for a Cathedral, or that it was itself reconstructed to become the cathedral of the city. We only know with certainty that a Crusading Church, whose ruins can still be traced, once stood upon this hill, and that at an earlier period the principal mosque of the town occupied the same site. Many persons were killed within this mosque when the city was taken in 1102 by Baldwin the First, King of Jerusalem. It is quite possible that originally the basilica and temple were not widely separated, since adjacent to the ruins of the Crusaders' Cathedral the white stone foundations of another structure were formerly visible. These may have belonged to Hadrian's temple.

The question is raised by our inscription whether at so late a period the Ἀδριαεῖον must not have ceased to be a pagan temple.¹ The very term itself, used thus without explanation or qualification, is altogether unfavorable to such an inference. It has a well established meaning and belongs in the same category with Augusteion, Sebasteion, Marneion, etc. A temple converted to Christian uses would almost certainly have been speedily renamed. Furthermore, it is known that pagan sanctuaries persisted for a long time in other centres of Palestine that were close at hand. In the fifth century Marcus Diaconus speaks of the Marneion, or Temple of Zeus, as still standing at Gaza side by side with Christian edifices. As late as 400 the inhabitants of Raphia zealously defended their temple (Sozomen VII, 15), and other localities on the Philistine coast were long predominantly pagan. The same was likewise true in Phoenicia to the north. We have had a different impression regarding Caesarea by reason of its ecclesiastical importance, but our inscription now supplies evidence that even there the complete ascendancy of Christianity was long delayed.

5. *Fragments of a Nabatean Inscription found at Petra.*

While visiting Petra in November, 1912, I chanced upon two small fragments of a Nabatean inscription that were lying upon the floor of one of the more imposing tombs. The fact that they were discovered together, as well as their general resemblance in thickness and quality of material, make it probable that they were parts of the same block of sandstone. Evidently this had been prepared originally to cover one of the graves,

¹ Vailhé, in speaking of the martyrs of Caesarea, says of Saint Hadrian, whose martyrdom is recounted by Eusebius, that his church has just been discovered (*Catholic Encyclopedia*, III p. 134b). Is this a reference to Père Germer-Durand's report of our inscription? If so, the hypothesis will have to be dismissed as improbable. For the tradition preserved in Jerome that the house of Cornelius was turned into a Christian church, compare *Epistola* CVIII-8, and also Eusebius, *Martyrs in Palestine*, I, 3.

now open and rifled, in this same tomb, presumably the one nearest at hand, in a recess of the right side-wall of the chamber. Both pieces are irregular in shape. A fountain pen standing between them serves to indicate their relative size. The larger is $11\frac{3}{8}$ inches broad and $12\frac{5}{8}$ inches high, while the other is $13\frac{7}{8}$ inches broad at its widest point, and $9\frac{7}{8}$ inches high. See Plate 2.

Upon the first there is cut in tall, narrow letters, the name **חרתת** (Harethath) i. e. Aretas, and upon the second fragment there remains the lower extremity of a line that was written above, and below two fully preserved letters **נט**, preceded by what might be part of **נ**. It is probable that they belong to the word **נבטו** (Nabaṭū) i. e. Nabateans. The larger piece is broken and ragged on the top as well as on its left edge, whereas the right and bottom edges, although somewhat chipped, show more regularity. It is thus made probable that this fragment belonged to the lower portion of the original slab. Such being the case, the stone was not cut to mark the resting place of Aretas himself, but of one of his descendants, or of one bearing some relation to him.

When it became possible, after our return to Jerusalem, to consult Brünnow and Domaszewski's Plan of Petra, I decided that the inscription had been found in the tomb to which they have given the number 808 (*Die Provincia Arabia I*, p. 400 ff.). It stands upon a terrace on the right as one emerges from the Sik and approaches the theatre; and is carved in a large mass of rock which juts out from the main cliff. The style of this tomb proves it to be a work of a later era of Petra's history. It is adorned by an overhanging frieze, Egyptian in character and supported by two pilasters, with a step-like parapet above. Brünnow and Domaszewski assign it to a group of tombs which they put in the closing portion of the reign of Aretas IV.

It seems that on September 6, 1896, Professor Musil discovered in this same tomb a sandstone slab upon one side of which an **Ⲛ** was cut above and then below the following inscription (CIS 351; *Die Provincia Arabia*, I, p. 402).

ענישו אח שקילת
מלכת נבטו בר

'Unaishu the brother of Shakilath,
The Queen of the Nabateans, the son of....

Evidently the end of the inscription is missing. The same piece of stone was seen by Brünnow and Domaszewski the year following (1897), but when they sought for it somewhat later it could not be discovered. In the early part of the year 1896, Mr. Gray Hill of Jerusalem found "a stone with some half obliterated writing on it" in a tomb which, from his description,

must have been No. 808. He states that according to all appearances the stone had been taken from a grave in a recess of the back wall, opposite the entrance, where 28 inches of not very hard concrete had been broken through recently to reach the grave below. At that time the other recesses on the right and left had not been disturbed. He concluded that the side of the stone upon which the inscription was cut must have been turned downward when the grave was sealed. Otherwise the concrete would have effaced the writing upon the soft sandstone surface. It is much to be regretted that he took no measurements of the stone, and that he was without facilities for making a squeeze or taking a photograph of the inscription. If the fragments under consideration are likewise from this same tomb, then we must infer that the natives, encouraged by earlier successes in their quest for antiquities, opened and rifled the grave in the recess at the right at some time subsequent to January, 1896. The pieces of the inscription may have been lying on the floor of the tomb chamber for a considerable period before we carried them out into the light and photographed them, and thereafter restored them to as safe a place as possible in their original home.

The Shākilath of the inscription found by Professor Musil was identified by Professor Euting as either the wife of Harethath IV (Philodemus), and sister of Maliku III, or as the mother of Rab'el II (71-105 A. D.). This last named Queen-Mother was in power from 71 A. D. onward, during the minority of her son. Brünnow and Domaszewski are inclined to accept her as the personage in question. On the other hand, our inscription, assuming that it belongs to this same tomb, would tend to support an identification with the wife of Aretas IV.

In any event, we have certain evidence for associating the name Aretas with a tomb on this terrace at the foot of the eastern wall, and the architecture of the tomb makes it probable that he was Aretas IV, who reigned from 9 B. C. to 40 A. D. This was the Aretas who was in power during the closing years of Herod's rule, whose daughter Herod Antipas put away in favor of Herodias. He was likewise the sovereign whose sway extended even to Damascus when Paul made his escape from the enemies that were lying in wait for him in that city (2 Cor. 11: 32).

